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Understanding and improving therapeutic engagement on acute mental health wards using experience-based co-design and the behaviour change wheel

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King’s College London

Florence Nightingale Faculty of Nursing, Midwifery and Palliative Care

Understanding and Improving Therapeutic Engagement on Acute Mental Health Wards Using Experience-based Co-design and the Behaviour Change Wheel

Sarah McAllister

Thesis incorporating publications submitted for the degree of

Doctor of Philosophy

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COVID-19 Impact Statement

The work in this thesis was impacted by the COVID-19 global pandemic. I was unable to test the intervention toolkit that was co-designed as part of this work. Further details of this impact are reported in Chapter 8 and include a description of the original research plan and how this changed to accommodate the impact of COVID-19.

Publications generated from this PhD study

Papers published in peer-reviewed journals and incorporated into this thesis:

1) McAllister S., Robert G., Tsianakas V. & McCrae N. (2019) Conceptualising nurse-patient therapeutic engagement on acute mental health wards: An integrative review. *International Journal of Nursing Studies* **93**, 106-118. https://doi.org/10.1016/j.ijnurstu.2019.02.013
2) McAllister S., Simpson A., Tsianakas V. & Robert G. (2021) "What matters to me": A multi-method qualitative study exploring service users', carers' and clinicians' needs and experiences of therapeutic engagement on acute mental health wards. *International Journal of Mental Health Nursing* **30**(3), 703-714.
3) McAllister S., Simpson A., Tsianakas V., Canham N., De Meo V. & Stone C. & Robert G. (2021) Developing a theory-informed complex intervention to improve nurse-patient therapeutic engagement employing Experience-based Co-design and the Behaviour Change Wheel: an acute mental health ward case study. *BMJ Open* **11**:e047114. doi:10.1136/ bmjopen-2020-047114.

Paper under review in Health Expectations and incorporated into this thesis:

1) McAllister S., Simpson A., Tsianakas V., Xenophontes I. & Robert G. (under review) What mechanisms of change enable participatory design approaches for improving healthcare services design? Developing a taxonomy of behaviour change techniques from an Experience-based Co-design study on an acute mental health ward

In addition to the above publications, collaboration throughout the course of this PhD has resulted in one further publication:

1) Sangiorgi D., Farr M., McAllister S., Mulvale G., Sneyd M., Vink J.E. & Warwick L. (2019) Designing in highly contentious areas: Perspectives on a way forward for mental healthcare transformation. *The Design Journal* **22(**sup1), 309-330.

ABSTRACT

Background: Nurse-patient therapeutic engagement on acute mental health wards is beneficial to service users' outcomes and nurses' job satisfaction. However, engagement is not always fulfilled in practice and interventions to improve engagement are sparse, ineffective and not theoretically underpinned.

Overarching aim: To understand and improve nurse-patient therapeutic engagement on acute mental health wards by co-designing a complex behaviour change intervention.

Methods: The study consisted of three phases, informed by the Medical Research Council's guidance for developing and evaluating complex interventions:

- Phase 1 included a systematic integrative review guided by the COM-B model for behaviour change and the Theoretical Domains Framework
- Phase 2a was the intervention development phase, which used a novel approach combining Experience-based Co-design (EBCD) and the Behaviour Change Wheel with service users, carers and clinicians on an acute mental health ward
- Phase 2b used the Behaviour Change Wheel including the COM-B model, Theoretical Domains Framework and Behaviour Change Technique Taxonomy v1 to code (i) the freely available Point of Care Foundation EBCD toolkit, (ii) this study's protocol, (iii) event evaluation questionnaires and (iv) fieldnotes from participant and non-participant observations of the co-design workshops conducted in this study
- Phase 3 intended to conduct a quasi-experimental pre-post-test on a control and intervention ward using a structured observation tool and the VOICE questionnaire to evaluate the intervention's impact on the amount and quality of nurse-patient therapeutic engagement and service users' perceptions of inpatient care respectively. Post-testing was disrupted due to COVID-19.

Results

- The systematic integrative review included 37 studies and identified five "Principles of Engagement" (published paper 1). These principles were considered the active phase of engagement i.e., when nurses and service users interacted therapeutically. The Principles were directly influenced by either the nurses' or service users' capability, opportunity and/or motivation to engage. Collaborative approaches to improving engagement were recommended due to the lack of the service user voice within the identified literature

- Phase 2a consisted of an experience gathering phase (published paper 2) and a co-design phase (published paper 3). Eighty hours of non-participant observation and semi-structured interviews with 14 service users, two carers and 12 clinicians explored experiences of therapeutic engagement and empirically confirmed the "Principles of Engagement". The service users, carers and clinicians were then brought together in a series of co-design workshops and developed the *Let's Talk* complex behaviour change intervention toolkit to improve nurse-patient therapeutic engagement on acute mental health wards
- Phase 2b (paper 4 – submitted) found that EBCD functioned through a complex, interrelated set of mechanisms which were reinforced through the recommended staged approach and by enabling an emotional shift within participants. The first taxonomy of 31 behaviour change techniques and 11 mechanisms of action associated with EBCD was developed
- Phase 3 included results from 80-hours of pre-test observations on a control and intervention ward, which showed that nurses' most common behaviour was clinician-clinician interaction, closely followed by solitary, task orientated behaviours. A quarter of observations were found to be in the nurse-patient interactive behaviour category. Most interactions were neutral in nature, followed by positive with few interactions being negative. Phase 3 also included results from 29 VOICE questionnaires completed by service users on the intervention ward and 31 VOICE questionnaires on the control ward. Mean VOICE scores for both wards fell within the lower half of the scale, with just one-point difference between the control and intervention ward. This may suggest that service users' overall perceptions of inpatient care were in the positive range; however, there were a large range of responses on both wards, which indicates that some perceptions were negative, whilst others positive

Conclusion: Overall this thesis makes unique and important contributions to the literature on therapeutic engagement, EBCD and the Behaviour Change Wheel approach to intervention development. It has developed a new, co-designed model of engagement that has subsequently been used in local and national policy to guide nurses' practice. A novel approach combining co-design and behaviour change theory was used successfully to design an intervention which aimed to improve nurse-patient therapeutic engagement on acute mental health wards. The Behaviour Change Wheel provides behavioural tools to guide intervention development whilst EBCD provides a collaborative process which may potentially bring about wider changes in the culture of acute mental health wards, independent from the specific impacts of a co-designed intervention.

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To all the service users, carers and clinicians who took part and collaborated in this research, I could not have done it without you. Thank you for your time, dedication and passion.

List of abbreviations

The following abbreviations are used within this thesis:

APEASE	affordability, practicability, effectiveness/cost effectiveness, acceptability, side effects/safety and equity
BCT	Behaviour Change Technique
BCTTv1	Behaviour Change Technique Taxonomy Version 1
BCW	Behaviour Change Wheel
CMHT	Community Mental Health Team
CNWL	Central and North West London NHS Foundation Trust
COM-B	Capability, Opportunity, Motivation, Behaviour
CQC	Care Quality Commission
DH	Department of Health
EBCD	Experience-based Co-design
HCA	Health Care Assistant
MHA	Mental Health Act
MRC	Medical Research Council
NA	Nursing Associate
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
NIHR	National Institute for Health Research
NMC	Nursing and Midwifery Council
NSUN	National Survivor User Network
OT	Occupational Therapist
PAR	Participatory Action Research
PET	Protected Engagement Time
PPI	Patient and Public Involvement
RCPsych	Royal College of Psychiatrists
RMN	Registered Mental Health Nurse
TDF	Theoretical Domains Framework
TT	Time to Talk
UK	United Kingdom
WHO	World Health Organisation

Trigger film of experiences

A film showing service user and carer experiences of therapeutic engagement on acute mental health wards was co-designed with the service users and carers who took part in this PhD study.

This film can be watched alongside reading this thesis to bring the experiences of the co-design team to life.

The film can be found via this link:

https://vimeo.com/545101748/c87b8cba8a

CHAPTER ONE: INTRODUCTION

1.1 Introduction

The work in this thesis aims to:

1) Conceptualise nurse-patient therapeutic engagement on acute mental health wards
2) Co-design and test a complex behaviour change intervention to improve nurse-patient therapeutic engagement on an acute mental health ward
3) Evaluate the impact of the intervention on a control and intervention ward
4) Understand the behavioural mechanisms behind a participatory research method called Experience-based Co-design (EBCD)

This chapter begins by outlining where the ideas for this research originated and how they developed. It then identifies and describes the central concepts of the work and concludes by describing how this thesis is organised.

1.2 Impetus for the research

The work in this thesis was informed by published research which I led as part of my Master's dissertation (McAllister & McCrae 2017), patient and public involvement (PPI) activities I coordinated and my own experience as a practicing mental health nurse on an acute mental health ward.

I was first introduced to the term "therapeutic engagement" as a student mental health nurse. In my training, therapeutic engagement was central to the nurse's role and involved talking to service users to understand their problems and bring about positive changes in their life. In 2014 I graduated as a registered mental health nurse, and quickly became aware of how difficult it was to spend uninterrupted therapeutic engagement time with the service users in my care. Over the next six months I consulted with service users and fellow nursing colleagues on my ward to explore their thoughts on therapeutic engagement. Service users said it was a vital aspect of the care they expected to receive. Nurses thought it should be at the forefront of their clinical duties, but often did not feel supported, or occasionally confident, to engage therapeutically. In 2015-2016 I therefore undertook a mixed-methods study that explored the actual and potential therapeutic role of the mental health nurse in psychiatric intensive care (McAllister & McCrae 2017). The service user and clinician participants agreed that to improve therapeutic engagement on acute wards, it was vital for a team inclusive of service users, nurses and the wider multidisciplinary team to work together.

My findings prompted me to conduct a literature search around inclusive, participatory research methods, and I discovered EBCD which, at the time, had only been reported once previously in a mental health setting (Springham & Robert 2015). Through further networking and consultations with the Different Voices service user group at Central and North West London NHS Foundation Trust (CNWL), the Clinical Service Director at CNWL and Professor Glenn Robert at King's College London, the idea emerged of using EBCD as a method for developing an intervention to improve the quality of nurse-patient therapeutic engagement on acute mental health wards.

This initial research idea was gradually developed through further input and consultation from service users at Different Voices. I also consulted service users and the coordinator of ResearchNet at Oxleas NHS Foundation Trust in South London, a co-production network that is made up of service users and carers who conduct research at the Trust (Springham 2011). In 2017 the study was submitted to the National Institute for Health Research (NIHR) Clinical Doctoral Research Fellowship programme; funding was awarded in April 2018 and I conducted the research over the following three years.

1.3 Ontological and epistemological underpinnings

Just as this research was conceived with service users and clinicians, active and collaborative service user, carer and clinician involvement has been a constant throughout all its subsequent stages. The research has been conducted within a participatory inquiry paradigm which assumes that experiential encounters with the world underpin our being and knowing (Heron & Reason 1997). Those involved in such research engage in democratic dialogue and are both co-researchers and co-subjects (Heron 1996). Together, they construct knowledge collaboratively to define the questions and methods for exploration (propositional knowing), then apply these methods within their world of practice (practical knowing). This leads them to experience their world in new ways (experiential knowing) and co-create ways to represent this experience (presentational knowing). Together co-researchers iterate through these forms of knowing several times to form a revised and enriched understanding of their original questions (Heron & Reason 1997).

In the context of my research, this paradigm has been realised by enabling a group of service users, carers and clinicians (the co-design team) to share their personal experiences of therapeutic engagement. Through interviews and a series of facilitated workshops the co-design team have been encouraged to closely examine their experiences and formulate a joint understanding of how these experiences may be improved. This took the form of four overarching joint improvement priorities. These joint improvement priorities were the basis for co-designing an intervention toolkit to improve therapeutic engagement. During each stage of the project, the co-design team and I have reflected and built on our previous experiential knowledge, to ultimately formulate a comprehensive intervention toolkit grounded in our joint understandings and experiences of therapeutic engagement on acute mental health wards. The following chapters of this thesis describe and explore this process.

1.4 Terminology and definitions

As the work in this thesis was developed through a highly collaborative process involving the input of service users, carers and clinicians (the co-design team), throughout this thesis I refer to “we” meaning the co-design team and myself.

Three concepts require defining so the reader understands how these have been operationalised within the work: therapeutic engagement, service user involvement and behaviour change. A brief explanation of each is given in turn below before I outline the wider context in which this research took place in Chapter 2.

1.4.1 Nurse-patient therapeutic engagement

Therapeutic engagement has long been regarded as the essence of mental health nursing (Peplau 1952), with numerous policy initiatives highlighting the need for increased nurse-patient contact (Department of Health [DH] 1994, DH 2006, Scottish Executive 2006, NICE 2011). Broadly speaking, engagement is characterised as the use of verbal and non-verbal interchange between nurse and service user to improve a service user’s mental health (Cormack 1976, Thomson & Hamilton 2012). Engagement builds trusting nurse-patient therapeutic relationships, which are a strong indicator of successful nursing care (Hagerty & Patusky 2003, Hartley et al. 2019). However, there remains a lack of established engagement practices within acute inpatient care (McKeown 2015). To date there has not been an agreed working definition of engagement, with little specific indication as to how nurses engage as part of their role. This results in nurses assuming an *ad hoc* approach to engagement (Anderson 1983, McAllister & McCrae 2017) or reverting to more measurable tasks such as ward administration (Rose et al. 2015). Since research shows that the effectiveness of mental health nursing depends on engagement between nurses and service users (Browne & Cashin 2012, McKeown et al. 2017), there is an urgent need to formulate a holistic understanding of the essential components of engagement and develop interventions that will promote this vital area of nursing practice.

1.4.2 Service user involvement

In keeping with the participatory inquiry paradigm that underpins this PhD, a central feature of the work presented in this thesis is that of service user involvement. Meaningful involvement of service users is increasingly promoted as an indispensable part of mental health service delivery and research (DH [Department of Health] 2010, DH 2011, Mental Health Task Force 2016, INVOLVE 2020a). Despite this, there remains considerable debate as to what it means for service users to be involved in research or practice (Tambuyzer et al. 2014, Rose & Kalathil 2019) and involvement often remains tokenistic (McCann et al. 2008, Omeni et al. 2014). Differing definitions of service user involvement may confuse well-meaning professionals, and whilst words such as involvement, participation and engagement are often used interchangeably, they mean different things in practice (Storm et al. 2010) and different things in different contexts (Locock & Boaz 2019). INVOLVE, a United Kingdom (UK) national advisory group on public involvement in NHS, public health and social care research has differentiated the concepts of involvement, engagement and participation as shown in Table 1. This is how these terms are considered and applied in the context of this thesis.

Table 1 – INVOLVE definition of service user involvement, participation and engagement (INVOLVE 2020b)

Involvement	where people are actively involved in research projects and in research organisations
Participation	where people take part in a research study
Engagement	where information and knowledge about research is shared with the public

As discussed in section 1.2, the aspiration from the beginning was to involve service users within my research. It was important to me that their involvement was not merely tokenistic, therefore I needed a method that would ensure involvement was at the heart of the research process. Within the NHS research community there has been growing interest in participatory approaches to conducting research (e.g., Rose et al. 2018, Locock & Boaz 2019, Palmer et al. 2019). One example is patient and public involvement (PPI), which involves research being conducted with or by members of the public, rather than to, for or about them (INVOLVE 2020b). Throughout the duration of this study, I consulted with a PPI group of 10 mental health service users on areas such as developing research materials and advice on processes within the study. This group was identified for me by the CNWL PPI research lead and consisted of current and former service users at the Trust who had various experience and training in PPI activities. However, I felt that this level of involvement did not go far enough to ensure that service users genuinely shaped all aspects of the work.

Another approach is co-production, which suggests that service users and staff work together to design and deliver a service, ensuring that people with lived experience contribute as equal partners. This encompasses any development, governance, delivery and evaluation processes (INVOLVE 2018a). Co-production across the whole research cycle is an ambitious goal (Locock & Boaz 2019) but co-design is a specific activity within co-production (Osborne et al. 2016, Brandsen et al. 2018), enabling producers and users of a service to actively and creatively work together to formulate and design solutions to a problem or a public service (Osborne et al. 2016). Using co-design to develop an intervention to improve therapeutic engagement seemed appropriate and realistic in the context of this PhD.

Although the term “co” suggests partnership and collaboration, the extent to which service user involvement is operationalised within these approaches is unclear, with research suggesting involvement may still be tokenistic in some cases (Hahn et al. 2017). Tokenism occurs when there is the appearance of service user involvement but in reality, service users’ ability to have influence is minimal (Romsland et al. 2019). This may be due to a number of reasons, for example service users’ abilities are underestimated, the methods used to involve them are condescending or they are not supported in ways which best enable them to share their experiential knowledge (Morrison & Dearden 2013, Snow et al. 2018). To avoid tokenistic involvement, implementing deliberate processes within the intervention development approach may ensure existing inequities are not reinforced (Barnes 2002).

One such process is EBCD (Bate & Robert 2007 (discussed in more depth in Chapter 3). EBCD is a structured approach that aims to bring service users, carers and clinicians together to co-design improvements in equal and active partnership (Bate & Robert 2007). This approach will be used in this PhD to place service users at the heart of intervention design. The service users will be considered experts by experience, whose expertise is founded on personal narratives and experience of receiving inpatient mental healthcare (Phillips et al. 2012). In keeping with the National Survivor User Network (NSUN) guidance on service user involvement (see NSUN 2014), service users will be supported throughout the project’s duration to adopt a leadership role by asserting their perspectives and collectively shaping the development of the intervention. In summary, service user involvement in the context of this thesis means the equal and active partnership between service users, carers and clinicians to co-design an intervention to improve therapeutic engagement.

1.4.3 Behavioural change

Unlike pharmacological interventions, interventions aimed at improving interpersonal processes rely on changes in behaviour. Behaviour is defined as *“anything a person does in response to internal or external events. Actions may be overt (motor or verbal) and directly measurable or, covert (activities not viewable but involving voluntary muscles) and indirectly measurable; behaviours are physical events that occur in the body and are controlled by the brain”* (Michie et al. 2014 p. 36). As such, behaviours can be modified by behaviour change interventions (Michie et al. 2011a). Behaviour change interventions compose a “*coordinated set of activities designed to change specified behaviour patterns*” (Michie et al. 2011a p. 1). In the context of this thesis, service users’, carers’ and clinicians’ behaviours will be examined in relation to how they experience therapeutic engagement. By understanding what matters to service users, carers and clinicians, acceptable solutions rooted in the reality of their daily lives on the ward can be formulated to change their behaviours with the aim of improving therapeutic engagement. The specific methods and approaches that will be applied to do this are discussed in more detail in Chapters 3, 5 and 6.

1.5 Organisation of the thesis incorporating publications

This is a thesis incorporating publications, meaning that three chapters (four, five and six) comprise published papers and one chapter (seven) is submitted in peer reviewed, academic journals that focus on specific aspects of the overall work. The methods, study setting, and participant details are presented in each of these papers. Word restrictions imposed by academic journals limit the amount of detail I can present regarding study methods, so a more detailed description and justification of each of the methods used are presented at the end of each chapter comprising a published paper. The overall organisation of the thesis is outlined below.

1.5.1 ***Chapter 2:*** *Background, Aims and Objectives*

Chapter 2 describes the wider context in which this research took place. It further examines the key concepts of this thesis - therapeutic engagement, service user involvement and behaviour change - by critically discussing them in the context of acute mental healthcare. This is followed by a justification as to why this study is necessary. Finally, the aims and objectives of the work are presented.

1.5.2 ***Chapter 3:*** *Methods for developing an intervention*

This chapter presents, critically examines and justifies the methods used for developing a complex healthcare intervention to improve therapeutic engagement. First it reviews common approaches to intervention development, then examines the specific collaborative, theoretically driven approaches which I chose to apply in this study. The chapter ends with a summary of how these approaches can contribute to the development of an intervention to improve nurse-patient therapeutic engagement on acute mental health wards.

1.5.3 ***Chapter 4 (paper 1):*** *Conceptualising nurse-patient therapeutic engagement on acute mental health wards: an integrative review*

Chapter 4 presents the findings from a systematic integrative review that begins to develop the theory and evidence-base around therapeutic engagement, by developing a conceptual model of nurse-patient therapeutic engagement on acute mental health wards (published article, International Journal of Nursing Studies) (McAllister et al. 2019).

1.5.4 ***Chapter 5 (paper 2)****: "What matters to me": A multi-method qualitative study exploring service users', carers' and clinicians' needs and experiences of therapeutic engagement on acute mental health wards*

Chapter 5 presents the experience gathering phase of the EBCD process. Semi-structured interviews with service users, carers and clinicians and observations of ward practice explored their experiences of therapeutic engagement on an acute mental health ward in order to understand their needs and inform a collaborative intervention development process (published article – International Journal of Mental Health Nursing) (McAllister et al. 2021a).

*1.5.5 **Chapter 6 (paper 3)**: Developing a theory-informed complex intervention to improve nurse-patient therapeutic engagement employing Experience-based Co-design and the Behaviour Change Wheel: an acute mental health ward case study*

Chapter 6 describes the theory-driven co-design behaviour change approach used to develop a complex behaviour change intervention. It uses behaviour change theory to identify and report intervention content, the influencing factors and mechanisms of action. It also critically discusses the theory-driven co-design behaviour change process. In keeping with the principles of co-design, three service users who were part of the co-design team are also co-authors of the paper (published article – BMJ Open) (McAllister et al. 2021b).

*1.5.6 **Chapter 7 (paper 4):** What mechanisms of change underpin participatory design approaches for improving healthcare services design? Developing a taxonomy of behaviour change techniques from an EBCD study on an acute mental health ward*

Chapter 7 provides a detailed examination of the behavioural mechanisms underpinning the Experience-based Co-design process as applied within this study. A service user expert by experience who facilitated some of the EBCD workshops as part of this work is a co-author on this paper (article submitted and currently under review in Health Expectations).

*1.5.7 **Chapter 8:** Planned evaluation of the intervention and impact of COVID-19*

Chapter 8 first describes my original plan to evaluate the intervention through a pre-test-post-test design and how this was interrupted by the COVID-19 pandemic. It then presents the results of the pre-test observations and questionnaires that were conducted prior to COVID-19 and discusses the findings within the wider literature. This is followed by a discussion on how the research plan changed in response to COVID-19, including sharing my findings to inform (a) a local quality improvement initiative in the case study Trust, (b) the NHS Long Term Plan's priorities for improving therapeutic inpatient care and (c) the Trust's policy on therapeutic engagement and observations.

*1.5.8 **Chapter 9:** Discussion*

Chapter 9 summarises the key findings of the thesis before critically reflecting on my own role within the research and the methodological approaches used to co-design a complex behaviour change intervention. It then discusses the study's strengths and limitations and makes recommendations for future research, clinical practice and healthcare education.

CHAPTER TWO: BACKGROUND, AIMS AND OBJECTIVES

2.1 Introduction

This chapter presents the background and context of the thesis. First it briefly describes the evolution of mental health care, before examining how the key concepts and features of this thesis are shaped by the unique and often challenging environment of an acute mental health inpatient ward. The chapter concludes with a justification for the research and the overarching aims and objectives of the thesis.

2.2 The acute care landscape

2.2.1 The evolution of mental health care

There is a high prevalence of mental illness in today's society. The World Health Organisation (WHO) reports that one in four people worldwide will be affected by a mental disorder at some point in their life (WHO 2001). People with mental health concerns present with a broad range of symptoms, generally characterised by a combination of distorted emotions, thoughts, behaviours and relationships with others (WHO 2013). Examples are depression, anxiety, schizophrenia and bipolar affective disorder. Most of these disorders can now be managed, and in most Western nations, this treatment is provided both in the community and in short-stay hospitals (King's Fund 2014). This, however, has not always been the case.

Mental healthcare has undergone radical transformation over the last two centuries. Throughout Europe, Canada and North America, the rise and fall of the mental asylum has seen long-stay institutions replaced with community or short-term acute inpatient care (Sealy & Whitehead 2004, Baarnhielm et al. 2005, Barbui et al. 2018,). A change from asylum to community care was aided by the discovery of neuroleptic drugs such as antipsychotics and mood stabilisers in the 1950s. These drugs had substantial, beneficial effects for some people with mental health concerns (Carpenter & Davis 2012), and in the UK, enabled treatment in outpatient clinics to rise from virtually zero in 1930 to 144,000 in 1959 (Lester & Glasby 2010).

Advances in treatment were coupled with an evolution in the understanding of what it means to suffer from a mental illness, catalysed by the growth of the service user and antipsychiatry movement at the end of the 1960s and beginning of the 1970s (Chamberlain 1990). These movements were a response against institutions, psychiatry and the dominance of the biomedical model (Millar et al. 2016). Once thought to be life-long, debilitating disorders, awareness grew that people with mental health problems can and do offer valuable contributions to society and had potential to recover from their illness (King's Fund 2014).

From this was born the recovery model of care, now explicitly adopted in contemporary national policy across the UK, Australia, Canada, Sweden and many other Western countries (Davidson et al. 2010, Amering et al. 2012). Recovery-orientated care is based on Anthony's (1993 pg. 527) internationally accepted definition of personal recovery:

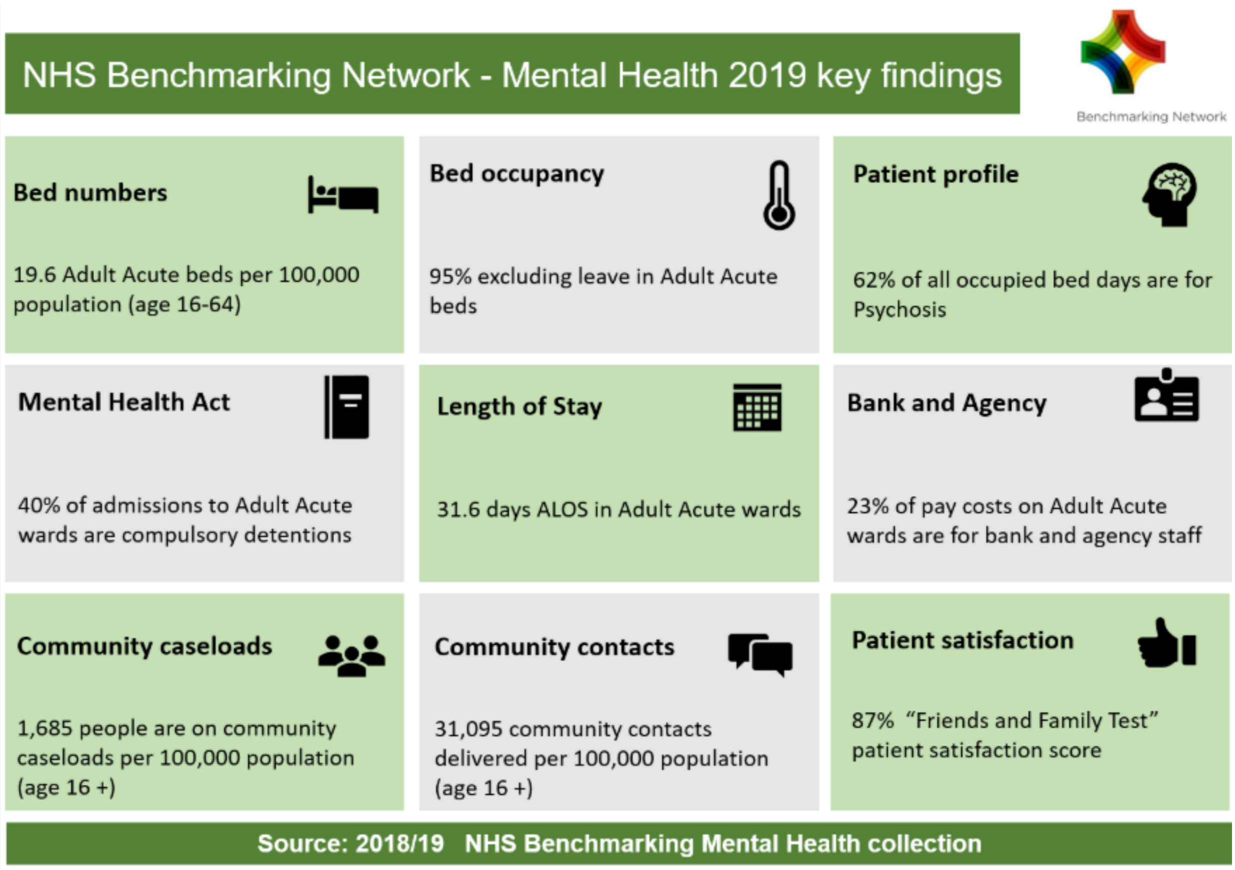
'[Recovery is] a deeply personal, unique process of changing one's attitude, values, feelings, goals, skills and roles. It is a way of living a satisfying, hopeful and contributing life, even with the limitations caused by illness. Recovery involves the development of new meaning and purpose in one's life as one grows beyond the catastrophic effects of mental illness.'

Recovery-oriented care challenges traditional patient-clinician roles by bringing together both professional and lived experience expertise in a process of co-production that supports people with mental health problems to identify and manage their own health and social care needs (Phillips et al. 2012). While there is still variation in the provision of recovery-orientated care, this model is considered the gold-standard of care in many Western countries (Roberts & Boardman 2013) and is supported by policy in the UK (DH 2006, DH 2011). Despite this, service user and clinician reports suggest that the medical model is still the overarching philosophy of care within many acute mental health inpatient settings (Beresford et al. 2016). This creates an overreliance on psychotropic drug treatment, rather than collaborative, patient centered nurse-patient therapeutic engagement (McKeown et al. 2017, Cutcliffe & McKenna 2018).

2.2.2 Acute mental health wards

In the UK, mental health care is delivered through a variety of services such as in general practice, community mental health teams, residential or inpatient care (Mind 2018). The most acutely unwell people are provided intensive medical and nursing care on short-stay acute wards and in 2019-20, 104,536 people in contact with mental health and learning disability services were admitted to hospital in England (NHS Digital 2021). In the UK, individuals admitted to acute wards vary in age, gender, and ethnicity and suffer from a variety of mental health conditions for example psychotic disorders such as schizophrenia, bipolar affective disorder, depressive disorders, suicidal ideation, anxiety and less frequently, personality disorders (NHS Confederation 2012). Service users may be admitted voluntarily or involuntarily under the Mental Health Act (MHA) (1983), with involuntary admissions rising year on year. In the UK, in 2018/19 49,998 people were detained under the MHA compared to 49,551 in 2017/18 (NHS Digital 2018, 2019), which may be an indication of the rising acuity of individuals admitted to acute wards, or the lack of suitable community alternatives to inpatient admission (Sharac et al. 2010). Acute wards are expected to meet single sex accommodation standards (NHS Improvement 2019), where some will be completely single sex, and others will provide a mixed sex day room with single sex sleeping areas. Acute wards are intended to be short stay, with service users admitted, on average, for 32 days, however some individuals have housing or other medical needs that mean this timeframe is not met (NHS Benchmarking 2020). Figure 1 gives a visual representation of the key features of acute wards.

Figure 1 – Visual representation of key features of acute wards (NHS Benchmarking 2019)



NHS Benchmarking Network - Mental Health 2019 key findings

Benchmarking Network

Bed numbers

19.6 Adult Acute beds per 100,000 population (age 16-64)

Bed occupancy

95% excluding leave in Adult Acute beds

Patient profile

62% of all occupied bed days are for Psychosis

Mental Health Act

40% of admissions to Adult Acute wards are compulsory detentions

Length of Stay

31.6 days ALOS in Adult Acute wards

Bank and Agency

23% of pay costs on Adult Acute wards are for bank and agency staff

Community caseloads

1,685 people are on community caseloads per 100,000 population (age 16 +)

Community contacts

31,095 community contacts delivered per 100,000 population (age 16 +)

Patient satisfaction

87% “Friends and Family Test” patient satisfaction score

Source: 2018/19 NHS Benchmarking Mental Health collection

As Figure 1 shows, there is a high demand for acute ward beds, with bed occupancy levels currently sitting above the 85% target recommended by the Care Quality Commission (CQC) and Royal College of Psychiatrists (RCPsych) (RCPsych 2019). In some areas of the UK acute wards operate at over 100% bed occupancy (CQC 2019), which results in people being admitted to wards that are far away from their homes. This can impact negatively on a person's mental health and can result in a loss of contact with family and friends. In addition to the high demand for beds, from 2014-2019 there was a 14% decrease in the number of available mental health beds (CQC 2019). Although this is in line with the ambition of the NHS Five Year Forward View for Mental Health (Mental Health Task Force 2016), reports suggest that community provision is not increasing to the levels needed to compensate for the reduction of inpatient beds (CQC 2019). As a result, there are increasing concerns about the ability of service users to access inpatient care when they need it.

The threshold for admission is currently so high that only the most acutely unwell people are admitted (McCrae & Hendy 2018). Reports from both clinicians and service users suggest that the ward environment is stressful and, in some cases, frightening (Cleary et al. 1999, Hiatt 2010, Gould 2011). This is compounded by high levels of violence and aggression, over-reliance on bank and agency staff who are unfamiliar to the service users (see Figure 1) and nurses who are busy doing an array of duties such as admissions and discharges, patient transfers, fulfilling patient leave requests, critical incidents and providing assistance to other wards in emergency situations (Bowers et al. 2005a). These competing demands inhibit clinicians' ability to provide safe and therapeutic care (Currid 2008). As a result, a culture of defensiveness has prevailed on acute wards (Ortashi et al. 2013), where clinicians and their employing organisations are fearful of litigation if something were to go wrong (Barker & Cutcliffe 1999, Sohn 2013). Rather than delivering recovery-orientated care that is focused on therapeutic interaction, record keeping, and medication dominates (Cutcliffe & McKenna 2018), and this is reflected in the myriad studies that show consistently low levels of nurse-patient engagement (Altschul 1972, Tyson et al. 1995, Whittington & McLaughlin 2000, Sharac et al. 2010, McAllister & McCrae 2017). This has serious implications for the quality of care that service users receive, as among other things, lack of therapeutic engagement on acute wards has been found to increase violence and aggression (McKeown et al. 2019c) and rates of absconding (Bowers 1999), therefore placing both service users' and clinicians' safety at risk.

In the latest State of Care report (CQC 2019), the CQC revealed that the quality and safety of acute wards in England remains their biggest concern. In 2018 they rated just 2% of acute wards inadequate, however in 2019 this rose to 6%, with 38% rated as requires improvement. These findings are mirrored by service user reports that identified poor quality (Mind 2013) and inadequate care on acute wards (Mind 2014, Royal College of Psychiatrists 2016). Therapeutic engagement was rated as the most important aspect of care by service users in a qualitative study that examined the similarities and differences between residential and acute ward care (Gilburt et al. 2010). Service users suggested that quality interactions fostered feelings of trust; however, wards were experienced as unsafe when interactions were infrequent. Therapeutic engagement has been found to compensate for an otherwise poor care environment (Molin et al. 2016). For quality engagement to occur, clinicians must have adequate skills to deliver a full range of therapeutic interventions, rather than relying on medication (CQC 2019). The NHS Long Term Plan (NHS 2019) pledges to improve the therapeutic offer on acute wards by 2023/24 by increasing investment in nursing interventions and activities that will result in better outcomes and experiences for inpatients. The quality of care received when acutely unwell is crucial to service users' recovery. There is an urgent need to improve the quality of inpatient care. Improving nurse-patient therapeutic engagement may be one way to help achieve this.

2.2.3 Who works on an acute ward?

In the UK, acute wards are staffed by a mixture of mental health specialist and non-specialist staff. The largest staff group are Registered Mental Health Nurses who have undertaken specialist mental health training, mostly at degree level (Health Education England 2019). Health Care Assistants (HCAs) work under the guidance of qualified staff and support nurses in the delivery of nursing care (NHS Health Careers 2015). Due to the many competing demands that nurses face, HCAs deliver much of the direct one-to-one care (Institute of Mental Health 2015). While often experienced, many HCAs have never received formal training in therapeutic communication techniques or other skills fundamental to nursing care, thus therapeutic engagement falls into an ever-widening gap between the responsibilities and abilities of HCAs and nurses (Richards & Borglin 2019). In response to this, a new Nursing Associate (NA) role has recently been created to act as a bridge between the unqualified HCA and qualified nurse workforce (Health Education England 2019). However, the first NAs only entered practice in 2017, so the long-term impact of their role is not yet known. In addition to nursing staff, acute wards are staffed by activities coordinators, occupational therapists, peer support workers, psychologists, junior medics, and a consultant psychiatrist who assumes the role of responsible clinician, with overall responsibility for the service users' care (Mental Health Act 1983).

Nurse retention is a growing problem that impacts the healthcare sector worldwide (Duffield et al. 2014, Roche et al. 2015). In England, from 2014-2019 there was a 2% decrease in the number of mental health nurses, with an across-the-board vacancy rate of 14.3% (House of Commons Committee 2018). This creates an over-reliance on bank and agency staff who are unfamiliar to both service users and ward routines. There are strong links between the presence of regular nurses and HCAs and reduced rates of self-harm and physical violence, as well as the delivery of recovery orientated practices such as therapeutic engagement (Wyder et al. 2017). However, in 2019 bank and agency staff made up 23% of pay costs on acute wards (Figure 1), which impacts negatively upon both the quality and safety of care and on clinician and service user experiences.

2.2.4 Experiences and behaviours of mental health nurses on acute wards

The role of the nurse on acute wards is multifaceted and complex. Nurses must create a balance between fulfilling the needs and priorities of service users, whilst adhering to legal (e.g., MHA 1983), professional (e.g., Nursing and Midwifery Council 2018) and organisational responsibilities. This often involves managing competing and conflicting perspectives such as balancing humanistic ideals with the demand for ensuring a safe environment (Shattell et al. 2008, Delaney & Johnson 2014, Wyder et al. 2017). Nurses who spend more therapeutic time with service users report greater job satisfaction (Moreno-Poyato et al. 2018) and take fewer sick days (Dodds & Bowles 2001), which may reduce the use of costly and unfamiliar agency nurses discussed above. However, ideals about therapeutic engagement and dialogue with service users may run aground upon the realities of practice. Lack of therapeutic engagement has been a longstanding problem, dating back to the 1970s (Altschul 1972). More recent research shows that as little as 4-20% of nurses' time is spent on activities that can be considered therapeutic (Sharac et al. 2010). The gap between nurses' ideals and the reality of practice creates feelings of cognitive dissonance, guilt, insufficiency and frustration (Graneheim et al. 2014, Chambers et al. 2015).

Nursing work is often criticised for the limited extent of collaboration with service users, particularly in areas such as care planning or medication administration (Terry & Coffee 2019). Instead, nursing work is described as task orientated, characterised and shaped by the demanding and chaotic practice environment (Johansson et al. 2013, Rose et al. 2015). When lack of time creates a barrier to patient care, nurses may shift their focus from the individual service user towards practical tasks in an attempt to shield themselves from the anxiety, stress and fear that comes from an overwhelming workload (Lützen & Schreiber 1998, Cleary et al. 2012, Gabrielsson et al. 2016). In contrast, some nurses may attempt to suppress their own emotions to give effective nursing care which may lead to emotional exhaustion and burnout (Cleary & Edwards 1999, Edwards et al. 2017). This may impact negatively on therapeutic engagement, as highlighted in a recent systematic review of emotional labour in mental health nursing (Edwards et al. 2017). To manage emotional labour, nurses use what Hochschild (1983) calls surface acting. Rather than engaging in a committed, empathetic manner, interactions become superficial and detached (Edwards et al. 2017). As nurses perceive therapeutic engagement to be essential to "good" nursing work (Clearly et al. 2012, Gabrielsson et al. 2016), providing less than perfect care exacerbates these negative emotional responses (Fourie et al. 2005, Rose et al. 2015).

Emotional labour is often seen as a byproduct of caring roles. This may hamper nurses' efforts to be recognised as a professional occupation due to caring's association with "women's work" (Gray & Smith 2009, Barker & Buchanan-Barker 2011). Nurses still report that nursing knowledge is not integrated into clinical decision-making processes (Berg & Hallberg 2000) and their autonomy as professionals is not always respected (Dickens et al. 2005, Santangelo et al. 2018). Though therapeutic engagement is central to the nurse's role on acute mental health wards, nurses work is not well described or understood, even by nurses themselves (Deacon et al. 2006, McAllister & McCrae 2017). This has enabled the medical model to dominate, with some nurses feeling unable to embrace more relational, recovery orientated approaches to care (Barker & Buchanan-Barker 2011). In contrast, when nurses' roles are more autonomous, they take personal responsibility for the care they deliver, which gives rise to respectful, connected and trusting therapeutic interactions and greater overall job satisfaction (Cleary et al. 2012, Delaney & Johnson, 2014, Gabrielsson et al. 2016). For this to occur nurses need to be supported to make decisions about the care they delivered (Gabrielsson et al. 2016).

2.2.5 Experiences and behaviours of service users in acute mental health care

Like nurses, service users' accounts of their experiences of acute wards are relatively consistent. A study of acute wards (Radcliffe & Smith 2007) discovered that at any time during the day an average of 84% of service users were socially disengaged. In a review that included literature from Australia, Canada, Germany, Portugal, Switzerland and the UK, Cutcliffe and colleagues (2015) found that service users experienced acute wards as devoid of warm, respectful therapeutic relationships, with a dearth of information or choice about treatments and no formal or informal talking therapies. Instead, service users experienced disinterested, controlling and coercive care. Other studies (Beresford et al. 2016) found that clinicians often interpreted individual's mental health problems through a narrow medical model lens, despite decades of research failing to confirm biomedical explanations for mental illness (Thomas 2013). Pharmacological treatments are prioritised over collaborative clinician-patient engagement, which leaves service users feeling stigmatised and alienated from their care team (Beresford et al. 2016, McKeown et al. 2017). Despite a recognition of the importance of collaborative care planning by clinicians, service users were often not involved in this process and felt as if they had no say in the trajectory of their care (Coffey et al. 2019).

In contrast, a somewhat different experience was reported by some service users. Rather than feeling constricted by the rules and regulations of acute wards, some felt freed from unhelpful behaviours or damaging situations that occurred outside of the ward environment (Thomas et al. 2002). The company of other service users was considered a beneficial aspect of their inpatient stay; however, they still lacked therapeutic engagement with clinicians (Shatell et al. 2008, Johansson et al. 2009, Stenhouse 2011). Therapeutic engagement has been found to improve satisfaction of care for people who were legally detained (Wykes et al. 2018), demonstrating the link between engagement and improved patient experiences (Gilburt et al. 2008). This is important as positive patient experience has been associated with reduced length of stay and improved treatment adherence (Charmel & Frampton 2008).

Recent policy drivers (NICE 2011, The Mental Health Task Force 2016) have called for urgent improvements to the experiences of people with mental ill-health, with priority placed on designing services in partnership with service-users and carers (Wykes et al. 2018). However, predominantly quantitative measures such as the Friends and Family test are the only way that organisations collect information about service user experience (NHS England 2014a). The purpose of these surveys has been questioned by a growing number of experts (Bevan et al. 2007, Sizmur et al. 2015, Burt et al. 2017, Robert et al. 2018). Interviews with service users point to consistently poor experiences and low levels of overall satisfaction with inpatient care (for example: Rose 2002, Moore 2012, Francis 2013, Siddique 2015, Beresford et al. 2016, Cutcliffe & McKenna 2018). However positive responses on surveys can often cause services to overlook the negative experiences that service users describe in interviews (Burt et al. 2017). Thus, service users lack a voice both with the trajectory of their care, as described earlier, and in how services measure and respond to their needs.

2.2.6 Nursing interventions on acute wards

As highlighted above, the function of acute wards is varied, with safety maintenance, accurate assessment, documentation, and delivery of psychological and medical treatment and basic care at the heart of the nurses' role (Bowers et al. 2005a, NHS Employers 2006). Arguably therapeutic engagement is required to successfully carry out most of these functions, thus greater focus needs to be placed on psychosocial and relational aspects of mental health nursing that foster understanding, empowerment and personal growth in those receiving inpatient care (Mullen 2009). In recent years there have been several studies that evaluated nursing interventions on acute wards. Some notable examples include "Safewards", a package of 10 interventions aimed at reducing conflict and containment rates (Bowers et al. 2015) and "Star Wards", which consists of 75 interventions to improve outcomes and experience for service users, staff, family, friends and carers (Janner 2007). Other examples include interventions to reduce absconding (Bowers et al. 2005b), violence reduction (Björkdahl et al. 2013, Duxbury et al. 2019) and improvements to the nurse-patient therapeutic relationship (Berry et al. 2012, 2016, Moreno-Poyato et al. 2018). Overall, these evaluations showed positive results. While some aspects of these interventions focused on improving therapeutic engagement, none were specifically designed to improve engagement between nurses and service users on acute wards. To date, there have been few interventions implemented to improve this aspect of care.

Protected Engagement Time (PET) – an intervention that enables nurses to devote time each day (typically an hour) for one-to-one sessions with service users (King's Fund 2005) – is central to the handful of interventions specifically designed to improve therapeutic engagement (e.g., Edwards et al. 2008, Nolan et al. 2011, Thomson & Hamilton 2012, Dodd et al. 2018, Molin et al. 2018). PET stemmed from the "Refocusing Model" which was a package of interventions implemented to reduce work strain on inpatient staff (Dodds & Bowles 2001, Bowles & Howard 2003). Following positive indicators from the Refocusing Model (Dodds & Bowles 2001), PET was adopted as a standalone intervention in mainstream policy (e.g., MHAC 2008), which resulted in its top-down implementation across many mental health services across England. However, evaluative studies of PET have found no significant difference on staff or patient reported outcomes (Edwards et al. 2008, Thomson & Hamilton 2012, Dodd et al. 2018). This may be because PET was intended to be used alongside other interventions. Its use as a standalone intervention stemmed from an atheoretical, common sense approach, rather than being guided by an explicit, systematic and comprehensive theoretical approach.

Further, PET was not designed in partnership with service users and carers and its ethos contradicts findings that suggests service users prefer shorter, but more readily available therapeutic interactions with nurses (McAllister & McCrae 2017). Various personal, relational, social and organisational contexts are likely to influence nurse-patient behaviour (Priebe & McCabe 2008). Therefore, to address the limitations of previous interventions, systematically and comprehensively accounting for these experiences and behaviours by engaging service users, carers and clinicians in a collaborative, theoretically driven intervention design process is likely to be an important aspect of any future work; particularly as service user involvement in all areas of healthcare has been described as the "blockbuster drug of the century" (Dentzer 2013).

2.3 Approaches to involving service users in practice and research

As described in Chapter 1, service user involvement is a central feature of this thesis and has a long history in mental healthcare. This chapter will now examine the history, background and context to service user involvement both in mental health practice and in research and consider any implications for my work.

2.3.1 Service user involvement in mental healthcare

Service user involvement in mental healthcare has a long history that spans almost five decades (Millar et al. 2016). Its conception was supported by the changes in the mental healthcare landscape discussed in section 2.2.1 and grew from a desire to provide services that are responsive to service users' needs and preferences (Boyd et al. 2012). It is now a key policy driver which – rhetorically at least – underpins all mental healthcare (e.g., DH 1992, DH 1994, DH 2012, Francis 2013, Mental Health Task Force 2016). Two approaches to service user involvement have emerged: a consumerist approach and a democratic or emancipatory approach (Beresford & Carr 2012). A consumerist approach is concerned with increasing choice, for example enabling service users to choose between competing services or introducing what Hoggett & Hambleton (1987) called consumer solutions. Consumer solutions adopt techniques such as undertaking patient satisfaction surveys or introducing complaints procedures. This, however, falls short of directly involving service users with their care. In contrast, the democratisation approach involves service users in decision-making processes regarding their care (Hickey & Kipping 1998). From this, concepts such as patient-centred care, person-centred medicine and shared decision making emerged, which are now perceived as central to healthcare policy and practice both in the UK and globally (DH 2012).

The context of mental healthcare is unique however, and service user involvement can be impeded by high levels of stigma associated with being mentally unwell, which often means the service user voice is not heard in practice (Boardman 2011). On acute wards, service users are at risk of compulsory treatment under the Mental Health Act (1983). This creates an extreme power imbalance between clinicians and service users, which impacts on their ability to choose the type of care they want to receive, and allows more coercive, medical models of treatment to flourish (Health & Social Care Information Centre 2015). Some notable attempts have been made to address this through implementation of approaches that adopt more inclusive systems of cooperation and democracy, for example Soteria or Open Dialogue. The Soteria approach, first developed in the 1970s, ensures inclusion by fostering equal relationships between service users who suffer from schizophrenia spectrum disorders and staff. The approach provides a relational style of care that develops an understanding of the person's subjective experience of psychosis by "being and doing with", rather than relying on psychotropic medication. Medication is often not used or only used at low doses with the service users' permission (Mosher 1999, Calton et al. 2008). The Open Dialogue approach brings service users together with their families and clinicians who engage in "open dialogue" to collaboratively make sense of experiences. Medication is used selectively and similarly to Soteria, only with the service users' permission (Olson et al. 2014).

Unfortunately, these approaches are often still thought of as an alternative to usual care, although Open Dialogue is gaining interest in the UK with its implementation in some prominent mental health Foundation Trusts. Although there is still work to be done, the wider benefits of including service users in their care are well documented (Rise et al. 2013, Omeni et al. 2014, Gee et al. 2016) and both the Soteria and Open Dialogue approaches show at least equal and, in some cases, better treatment outcomes for those with schizophrenia, with considerably lower use of medication and coercive treatments (Calton et al. 2008, Seikkula et al. 2006, 2011). As these benefits have been recognised, service user involvement is slowly growing from participation in their own care and treatment, to participation in decisions concerning healthcare service research, education and policy (Storm et al. 2010, Tambuyzer et al. 2014).

2.3.2 Service user involvement in the design and delivery of healthcare services

Service user involvement in the design and delivery of healthcare services is a sought after but contested goal (Rose & Kalathil 2019). Involvement includes engaging members of the public in activities such as setting priorities, selecting research methods and outcomes, recruiting participants, collecting data, and interpreting and disseminating research results (INVOLVE 2020b). As highlighted in Chapter 1, there are different levels of service user involvement. At its most progressive, involvement can be recognised as co-production when "citizens play an active role in producing public goods and services of consequence to them" (Ostrom 1996 p. 1073). At its least progressive, involvement is tokenistic and service users are only consulted on predetermined decisions with no ability to define or influence change (Rose et al. 2003). Co-production requires partnership and delegated power, where service users have opportunities for leadership and equal access to decision-making power and resources (Arnstein 1969). Co-design has been proposed as a particular form of co-production (Durose & Richardson 2016) and uses participatory, user-centred design techniques to develop and implement improvements and innovations to public services (Bate & Robert 2007, Voorberg et al. 2015).

The value and importance of service user involvement is recognised in both international and national policy. Internationally, the World Health Organisation (WHO) promotes the use of co-production in the development of healthcare services (WHO 2015). Nationally, the NHS Five Year Forward View encourages working with local communities to co-design and implement new local care models (NHS England 2014b). Further, government funded organisations such as INVOLVE were created to advance public involvement in research (INVOLVE 2020c). In addition to policy and government, service user involvement in mental health research is supported empirically. Involvement encourages both the ethical design and conduct of research (INVOLVE 2016, Staniszewska et al. 2011) and studies are more likely to achieve recruitment targets, use relevant outcome measures and research questions with direct relevance to service users (Staley 2009, Ennis & Wykes 2013). In contrast, service user involvement has been criticised for being a response to austerity in public sector financing, where citizens are substituted for paid employees within public services (McGimpsey 2016, Fotaki 2015). The importance of fair pay for service users is supported by INVOLVE, who set out minimum payments for involvement work (INVOLVE 2018b). In its truest form, service user involvement is a radical approach that has transformational power and the ability to dismantle power structures and disrupt traditional roles (Beresford et al. 2016, Farr 2018). However, the extent to which true involvement can be realised is disputed.

Questions have been raised about whether true involvement is achievable, particularly in a mental health setting (e.g., Rose & Kalathil 2019). Before involvement even begins, pathologisation, stigma, conscious and unconscious biases, shame and discrimination, including from mental health services, are a reality for service users (Time to Change 2008). This means that service users' voices and lived experiential knowledge do not have equal status to that of medical professionals (Beresford et al. 2016, Rose & Kalathil 2019). Unlike other healthcare settings, people suffering from an acute phase of mental distress can be legally detained and treated against their will (Mental Health Act 1983). There is still fear of those who suffer from mental health problems, and concern for their safety and wellbeing means management of risk is a driving factor of modern mental health services (Thornicroft 2003, Morgan 2004). Service users are frequently seen as having different values, or as being non-conformist in their views (Beresford 2009). Therefore, it can be particularly challenging for service users to achieve equal status and credibility for their knowledge and lived experience expertise.

Service users say they participate so they can use their lived experience knowledge to achieve change (Beresford & Carr 2012). They expect their knowledge and experience to be respected and considered an asset (NSUN 2015). However, research shows that often service users are dissatisfied with their experiences of participation (Bee at al. 2015). Institutional control and organisational resistance to the challenges posed by service user involvement is one of the biggest barriers to change (Rose et al. 2014). Service users feel empowered when given the opportunity to communicate anger about harm, mistreatment and social injustice. “Hell-raising” and “righteous anger” is integral to involvement approaches (Cahn 2004); however, it is often avoided by agenda-setting that overlooks service users’ lived experiential knowledge, or even pathologised (Lewis 2014). The use of personal narrative and lived experience may be translated and steered by professionals or not incorporated at all (Barnes 2002, Hodge 2005). Furthermore, these approaches leave clinicians trapped in traditional practitioner roles, thus negatively impacting equal service user-clinician collaboration (Cahn 2004). An approach that was intended to be radical becomes co-opted by mainstream organisations, thus stifling the ability for challenge and self-expression, which are vital for empowerment and transformative change to occur (Carr 2007).

Overall, the use of power and control by services over service users is still a defining feature of mainstream mental healthcare, both in the delivery and design of healthcare. Co-production, co-design and other involvement approaches explicitly call for previous power structures to be dismantled and traditional roles to be disrupted (Beresford et al. 2016, Farr 2018). There is a need to provide space where open dialogue can occur, that encourages constant reflection on the manifestation of power dynamics (Farr 2018). In the context of this work, it was decided that EBCD would be the method to try and overcome some of these entrenched power dynamics. A full rationale for the use of EBCD is given in Chapter 3, section 3.7. Chapter 3 will also outline how EBCD was adapted to take into consideration the unique context of an acute mental health setting.

2.4 Justification for thesis

The evidence presented in Chapter 2 demonstrates that high quality, readily accessible therapeutic engagement is uncommon on acute mental health wards. This is likely to have a significant impact on both service users’ and nurses’ experiences and the quality of care. It may also negatively impact on service users’ clinical outcomes. The concept of therapeutic engagement is not well understood by nurses, which has clear implications for its delivery in practice. To date, interventions that specifically address therapeutic engagement are scarce and have not been found to improve the quality of nurse-patient engagement. These interventions are standalone interventions that are not theoretically driven, were not designed in collaboration with service users, carers and clinicians and implemented through top-down approaches. Therefore, the co-design of a robust, theoretically driven intervention toolkit to improve the amount and quality of nurse-patient therapeutic engagement is a timely contribution to improve the quality of care provided on acute mental health wards.

2.5 Aims and objectives of this research

This study will consist of three phases, each with their own aims and objectives, to fulfill the following overarching aim:

- To understand and improve nurse-patient therapeutic engagement on acute mental health wards

2.5.1 *Phase 1:*

Phase 1 is presented in Chapter 4 (paper 1). Its aim is to underpin the development of an intervention by reviewing the current literature and building a conceptual model of nurse-patient therapeutic engagement on acute mental health wards.

It explores the constituents of therapeutic engagement according to the experiences and perspectives of service users and nurses by answering the following questions:

1) How has nurse-patient therapeutic engagement been defined in the literature?
2) What factors influence nurse-patient therapeutic engagement?

2.5.2 *Phase 2a:*

Phase 2a is presented in two parts. Part 1 focuses on the experience gathering phase of EBCD and is presented in Chapter 5 (paper 2). Part 2 explores the co-design phase of EBCD and is presented in Chapter 6 (paper 3). The aim of Phase 2a is to co-design a complex behaviour change intervention to improve therapeutic engagement on an acute mental health ward.

It will do this by addressing three objectives:

1) Understand service user, carer and clinician experiences and needs relating to therapeutic engagement by observing practice and conducting semi-structured narrative interviews (paper 2)
2) Describe and demonstrate the implementation of a theoretically driven approach to co-designing a complex behaviour change intervention (paper 3)

3) Present the contents and potential mechanisms of action of the co-designed complex behaviour change intervention (paper 3)

2.5.3 *Phase 2b:*

Phase 2b runs in parallel to Phase 2a and is presented in Chapter 7 (paper 4). It aims to understand the mechanisms behind how the co-design process may change behaviours.

It will do this by addressing two objectives:

1) Develop the first taxonomy of behaviour change techniques relating to EBCD using the Behaviour Change Wheel (Michie et al. 2014) and Behaviour Change Technique Taxonomy Version 1 (Michie et al. 2013)
2) Characterise EBCD's potential mechanisms of action using the Theoretical Domains Framework guided by the Theory and Techniques Tool (Human Behaviour Change Project 2021)

2.5.4 *Phase 3:*

Phase 3 is presented in Chapter 8 and initially aimed to evaluate the impact of the co-designed behaviour change intervention on a control and intervention ward, through a pre-post-test.

It planned to do this by meeting the following objectives:

1) Examine the amount and quality of therapeutic engagement using a structured observation tool
2) Examine patient reported perceptions of care using a patient self-report questionnaire
3) Assess the acceptability of the intervention by conducting semi-structured interviews with a selection of nurses and service users on the intervention ward
4) Modify the intervention where necessary, alongside the co-design team, based on the interview and observational data

CHAPTER THREE: METHODOLOGICAL APPROACHES TO INTERVENTION DEVELOPMENT

3.1 Introduction

The preceding chapters have set the scene for this thesis by defining central concepts in Chapter 1 and examining the acute mental healthcare landscape and its implications for therapeutic engagement, service user involvement and behaviour change in Chapter 2. I have highlighted the need for a better understanding and conceptualisation of therapeutic engagement, which can then be used to inform the collaborative, theory driven development of an intervention to improve engagement in practice.

This chapter presents, critically examines and justifies the methodological approaches used for developing a complex behaviour change intervention to improve therapeutic engagement. The chapter first reviews common approaches to intervention development, then critically examines the specific collaborative, theoretically driven approaches I have chosen to apply in my study. The chapter ends with a summary of how each approach is intended to contribute to the development of an intervention to improve nurse-patient therapeutic engagement on an acute mental health ward.

3.2 Developing complex healthcare interventions

Healthcare interventions are developed to improve the health and wellbeing of patient groups, carers and healthcare professionals (O'Cathain et al. 2019a). Broadly speaking, complex interventions are described as interventions that contain multiple interacting components that may act independently or inter-dependently to produce an effect (Craig et al. 2008). As well as having several interacting components, complex interventions may also affect a range of outcomes, be influenced by features of the local context and target multiple populations, including service users, carers and clinicians. The boundary between simple and complex interventions is blurred and it is argued that complexity may stem from the type of research question posed rather than the intervention itself (Petticrew 2011).

To maximise intervention effectiveness, methodological rigour throughout all stages of intervention development is vital (Craig et al. 2008). Lack of rigour in the intervention development phase has led to research waste (Chalmers et al. 2014, Macleod et al. 2014), with up to 85% of healthcare research investment estimated to be wasted (Chalmer & Glasziou 2009). Expensive trials are conducted on flawed interventions that may be unfeasible, unacceptable, or ineffective (Hawe 2015), as demonstrated in a review of 51 pragmatic trials (Dent & Raftery 2011). Interventions that are efficacious in clinical trials often show reduced effects when implemented into real world practice environments (Glasgow et al. 2012). Further, some interventions are unable to be replicated in practice (Glasziou et al. 2008). This has clear impacts on clinical care (Glasziou et al. 2008), public health policy (Ahmad et al. 2010) and results in poor return on research investment costs (Neta et al. 2015).

The reasons for these disappointing impacts are multifactorial. Many interventions do not use an intervention development framework to guide development, testing, evaluation and implementation (Campbell et al. 2000) and are often built on the interpretation of past empirical studies (Grimshaw et al. 2005). This trial-and-error approach results in interventions that are not fully defined or developed (Campbell et al. 2000, Eccles et al. 2005). There is a scarcity of interventions rooted in theory (Michie et al. 2005) exposing a need to create a shared vocabulary that specifies interventions in greater detail according to theoretically predicted mechanisms of action (Michie et al. 2018). Not only should the description of the intervention elucidate what works, but also how and ultimately why the intervention components interact to achieve the proposed change (Hoffmann et al. 2014). However, interventions and the processes used to develop them are often inadequately reported (Hoffman et al. 2014, Hoddinott 2015). Therefore, to ensure research is robust and replicable and to optimise its translation into clinical practice, there needs to be more established guidance on the development and reporting of healthcare interventions (Glasziou et al. 2014, Hoffman et al. 2014, Duncan et al. 2020).

3.2.1 Enhanced guidance for developing complex interventions

To enhance guidance for intervention development, O'Cathain and colleagues (2019a) have comprehensively reviewed and synthesized the literature to create a taxonomy of eight approaches to developing healthcare interventions. This can be used to help developers select the approach that is appropriate to their context, values and needs. Although this taxonomy was created after the conception and execution of this thesis, it can be applied retrospectively to generate helpful insights. The eight approaches are listed in Table 2 below.

Table 2 – Taxonomy of approaches to intervention development (from O'Cathain et al. 2019a)

Category	Definition
PARTNERSHIP	The people for whom the intervention aims to help are involved in decision-making about the intervention throughout the development process, having at least equal decision-making powers with members of the research team
TARGET POPULATION-CENTRED	Interventions are based on the views and actions of the people who will use the intervention
THEORY AND EVIDENCE-BASED	Interventions are based on combining published research evidence and formal theories (e.g., psychological or organisational theories) or theories specific to the intervention
IMPLEMENTATION BASED	Interventions are developed with attention to ensuring the intervention will be used in the real world if effective
EFFICIENCY BASED	Components of an intervention are tested using experimental designs to determine active components and make interventions more efficient
STEPPED OR PHASED BASED	Interventions are developed through emphasis on a systematic overview of processes involved in intervention development
INTERVENTION SPECIFIC	An intervention development approach is constructed for a specific type of intervention
COMBINATION	Existing approaches to intervention development are combined

Developers can now select a diverse range of approaches that address distinct elements that may enhance the development process. It is important to note that there is no one-size-fits all approach, and each approach has its strengths and limitations. As an example, Multiphase Optimisation Strategy, as an efficiency-based approach, suggests carefully managing resources to develop interventions in a systematic way (Collins et al. 2007). Many projects using this approach have been funded by national funding bodies, but the approach is criticised for not being applied in a comprehensive way throughout the whole development process (O'Cathain et al. 2019a). In contrast, Intervention Mapping is a thorough and rigorous approach that uses theory and evidence to develop an intervention (Bartholomew et al. 2016). However, the process is so technical and time consuming that it is considered unfeasible by many intervention developers (Hansen et al. 2017). A combination approach may be used to offset the limitations of using one single approach. Before choosing an approach, O'Cathain and colleagues (2019a) suggest the careful consideration of six key questions which I have applied to my own study below:

1) **What is the intention of the intervention?**
    - In this thesis the broad intention is to improve the amount and quality of nurse-patient therapeutic engagement by changing nurses' behaviours
2) **What is the context of the intervention?**
    - Acute mental health wards
3) **What values inform intervention development?**
    - The values that informed intervention development are discussed in detail in Chapter 1, 1.2 and 1.3, but are broadly based on my own experiences of being a mental health nurse and the importance of having the service user and clinician voice at the forefront of intervention development
4) **What skills and experiences do the team bring?**
    - I am a mental health nurse with clinical experience on acute mental health wards and qualitative and quantitative research experience. I also have advanced training in behaviour change theory. My supervisory team has expertise in mental health nursing, intervention development and collaborative research methods
    - The service users, carers and clinicians that made up my co-design team brought with them lived experience of receiving mental health treatment on an acute ward
5) **Which approaches have resulted in interventions shown to be effective?**
    - Approaches to past intervention development are discussed in more detail in Chapter 2, 2.2.6. To summarise, most interventions to improve engagement have been developed through trial-and-error approaches and have not used a framework or theory to guide them. This has resulted in ineffective interventions. As this intervention will focus on changing behaviours, it will be rooted in behaviour change theory, which has been used successfully in mental health settings (e.g., Mangurian et al. 2017). Intervention development frameworks such as the MRC Framework (Craig et al. 2008) have also been used successfully to guide intervention development within a mental health setting (e.g., Lovell et al. 2008)
6) **What resources are available for intervention development?**
    - I was awarded a £280,000 NIHR grant over a three-year period, which will be used towards the development (and study) of the intervention and other associated costs
    - The NHS trust will provide conference rooms to conduct co-design workshops.

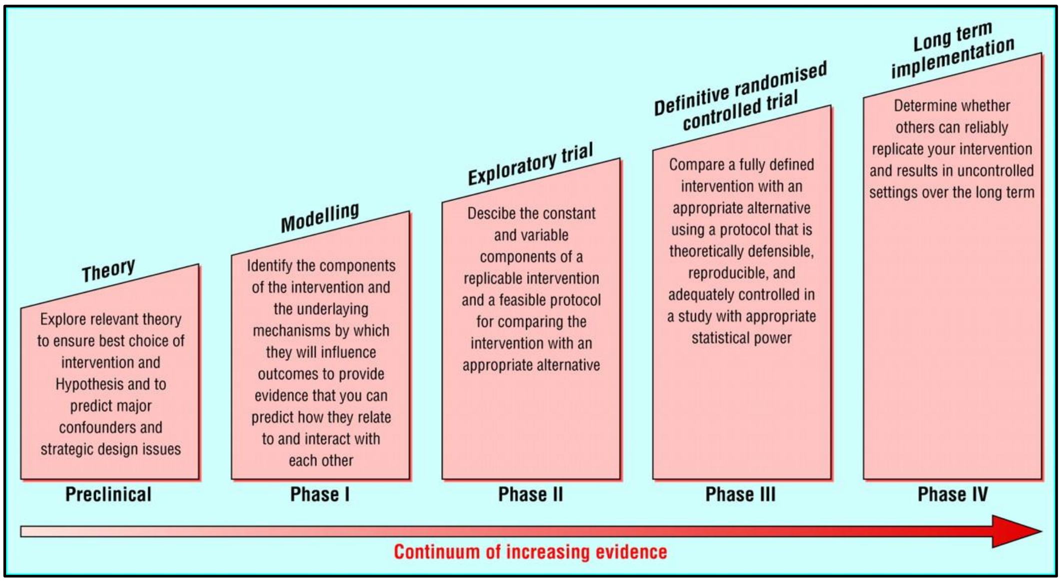
My emphasis is on ensuring a collaborative, theory driven approach that focuses on changing behaviours to bring about improvements to therapeutic engagement. As such, a combination approach to intervention development will allow for the input of service users, carers and clinicians, whilst ensuring the intervention is rooted in behaviour change theory and the process guided by an overarching intervention development framework. The specific approaches will now be critically discussed, culminating in a summary in section 3.9 of how each approach is applied in the context of this PhD study.

3.3 The Medical Research Council Framework for Developing Complex Interventions

One evidence-based approach to intervention development is the Medical Research Council's (MRC) framework for developing and evaluating complex healthcare interventions (Craig et al. 2008). Despite some criticisms (Mackenzie at al. 2010, Bleijenberg et al. 2018), it is the most widely cited framework for intervention development in health and social care and public health (Corry et al. 2013). The MRC framework was originally published in the year 2000 (Campbell et al. 2000), then updated in 2008 (Craig et al. 2008). Further guidance has been published on specific aspects of the intervention development phase (Bleijenberg et al. 2018). The MRC and NIHR have commissioned an update to the 2008 guidance, which was due to be published in 2019; however, at the time of writing this thesis, this has yet to be published.

The original framework (Campbell et al. 2000) outlined a phased, linear approach for developing complex interventions that comprised of a preclinical phase, a modelling phase, a testing phase and an implementation phase (Figure 2). While this original framework was a good starting point, it was not without its limitations. It failed to appreciate the complexity of adaptive systems, or contextual variation, such as social, political and geographical factors (Campbell et al. 2007, Craig et al. 2008). The complex nature of intervention development is not considered in its linear structure, where it may be necessary for processes to overlap, rather than be pre-determined (Massoud et al. 2016). Further, its scope is limited in terms of guidance in the development and modelling phases (Hardeman et al. 2005), particularly when there is no existing theory that guides or underpins intervention development (Correy et al. 2013).

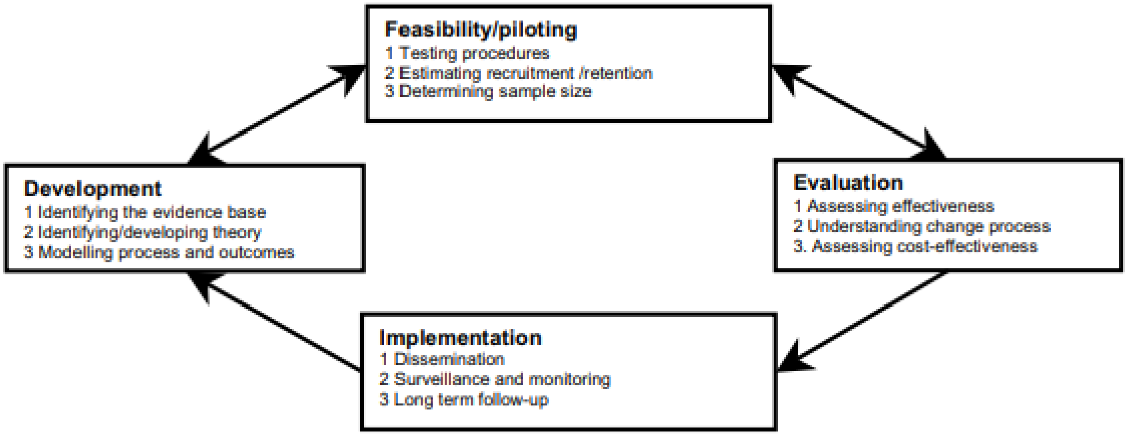
Figure 2 – The original MRC Framework for developing complex interventions (Campbell et al. 2000)



Considering these limitations, an updated version of the MRC Framework was published in 2008 (Craig et al. 2008). It maintains many of the key elements of the original framework but suggests a more iterative approach that may require flexibility in moving between each phase. It also gives more guidance on the development and evaluation stages. The updated framework includes four stages (Figure 3):

1) Development
2) Feasibility/piloting
3) Evaluation
4) Implementation

Figure 3 – Updated MRC Framework (Craig et al. 2008)

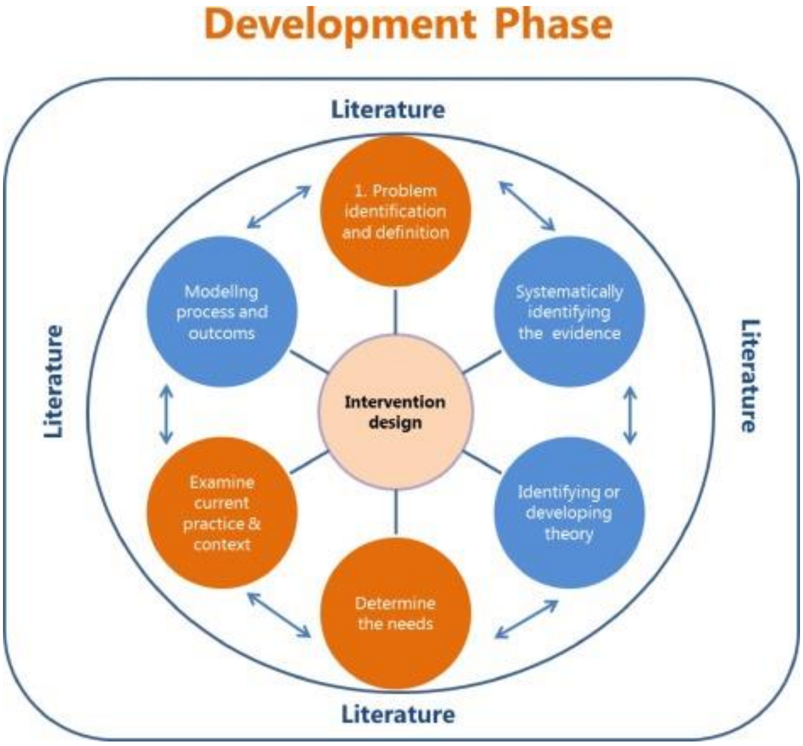


As shown in Figure 3, the development stage can be broken down into three steps. As set out in Craig et al. (2008), the first step encourages an examination of existing evidence through a systematic review. This allows a more in depth understanding of what has been done before and whether an intervention may be feasible and/or effective in the target population. The second step suggests using existing theory to provide a theoretical basis for the intervention and to understand potential mechanisms of action. In the final step, intervention developers model and test intervention prototypes to refine and optimise components. This can influence changes to the intervention's design or delivery prior to beginning the feasibility or pilot trial stage, which will examine the sample size, recruitment and retention needed for a larger scale definitive trial in the evaluation stage. The evaluation stage will assess the intervention's clinical and cost effectiveness and should refer to the theoretical underpinnings and feasibility study results to understand why the intervention was effective or not. Finally, the implementation stage should consider the long term follow up of the outcomes and impact of the intervention, including any unintended consequences. Additionally, one must plan from the outset how the results will be disseminated to key stakeholders and policymakers.

3.3.1 Critical evaluation of the MRC Framework

Despite its refinement, the 2008 version of the MRC Framework is not without its limitations. Research has identified gaps within the framework, particularly the need to further refine and enhance the development phase (Bleijenberg et al. 2018). A major flaw is its lack of guidance on how to examine and consider the context in which an intervention is delivered (Moore & Evans 2017). It is argued that additional knowledge around context is needed to enhance intervention development within the approach (Wells et al. 2012, Wight et al. 2016). As such, Bleijenberg and colleagues (2018) suggest four additional steps to intervention development within the MRC Framework: 1) Problem-identification and definition; 2) Determine the needs; 3) Examine current practice and contexts and 4) Intervention design (Figure 4). It is argued that following these additional steps will provide more in-depth knowledge when considering the delivery context and identifying the evidence base of an intervention.

Figure 4 – Enhanced development phase of the MRC Framework (Bleijenberg et al. 2018)



Blue = previous MRC development phases | Orange = updated MRC development phases

Examining these steps further, step 1, “problem identification and definition”, focuses on understanding the problem within its specific context and is proposed as a vital starting point for intervention development (Aranda 2008). This may include using qualitative methods such as interviews and focus groups to unpick the nature of the problem from different perspectives (Ludvigsen et al. 2013, O'Cathain et al. 2014). The use of qualitative methods is also recommended during step 2, “determine the needs”. In this step intervention developers examine the needs, perceptions, preferences and capacities of multiple stakeholders, including both recipients and providers of care. Including multiple stakeholders within intervention development is thought to increase intervention effectiveness and the likelihood that the intervention will be adopted in practice (van Meijel et al. 2004). Step 3, “examine current practice and context”, proposes the inclusion of multiple stakeholders to identify and understand the barriers and facilitators to the intervention and its implementation, culminating in the identification of a route for implementation. Finally, step 4, “intervention design”, is closely related with the modelling processes and outcomes step in the MRC Framework and takes this a step further to suggest the development of a full intervention prototype. This step is where decisions around content, active ingredients, dose and duration are made (Bleijenberg et al. 2018).

3.3.2 Use of the MRC Framework within this thesis

Developing a feasible intervention takes considerable time; particularly when the phenomena under investigation is not fully understood (Craig et al. 2008, O'Cathain et al. 2019b). My thesis focuses on the developmental phase of the MRC Framework. I first used the MRC Framework (Craig et al. 2008) as a pragmatic launching point from which the process of intervention development could begin. A key strength of this framework is that it supports flexibility when choosing a study design (Redfern et al. 2008), thus it enabled the study's methodology to evolve as I learnt more about the theory and process of intervention development. Although the MRC Framework guides researchers in recognising and adopting appropriate methods when developing complex interventions, solutions are often implemented before an in-depth analysis of the problem and its causes is conducted (Van de Ven 2007). Incorporating the additional elements from Bleijenberg and colleagues (2018) enabled consideration of the ways that I could best examine vital aspects in the intervention development phase, for example contextual factors and the needs of the target population. The approaches I used to do this will be discussed in more detail in the next section of this chapter.

3.4 The use of theory in intervention development

Theory can be defined as a coherent and non-contradictory concept, statement or idea that explains, predicts or organises phenomena, events or behaviour and specifies causal mechanisms or relationships between entities (Bem & De-Jong 1997, West & Brown 2013). Theories can be used to guide intervention development by enabling researchers to identify modifiable variables to produce the desired change (Eccles et al. 2005). By enabling the identification and investigation of mechanisms of action, theories help to explain how an intervention may work across different clinical populations and contexts (Glasgow & Emmons 2007, Michie et al. 2008). This may address some of the common issues around intervention development such as the ability to identify and separately assess individual intervention components (Blackwood 2006). Whilst the MRC Framework advocates the use of theory within the intervention development phase (Craig et al. 2008), it does not give guidance as to which theory to choose which methods to use or which techniques may be likely to bring about change.

There are multiple theories that can be used to develop interventions. In their review of intervention development approaches, O'Cathain and colleagues (2019a) found some of the most common theories used to develop interventions were the Behaviour Change Wheel (Michie et al. 2014), Intervention Mapping (Bartholomew et al. 2016), Normalisation Process Theory (Murray et al.

2010) and the Theoretical Domains Framework (French et al. 2012). However, in the complex intervention literature (e.g., Davies et al. 2010, Glanz & Bishop 2010, Prestwich et al. 2014, Davis et al. 2015), not all interventions were described using a theoretical framework. More specifically, as highlighted in Chapter 2, existing interventions to improve nurse-patient therapeutic engagement have also not explicitly stated the use of a guiding theory, which may go some way in explaining why these interventions were not successful.

The lack of an explicit theoretical underpinning may be because researchers do not consider the application of theory helpful or they may lack the skills to select or apply theory, especially given the paucity of guidance in this area (Gainforth et al. 2015). Current recommendations to use theory early in the design of interventions do not specifically describe how to incorporate theory into the development process (Tougas et al. 2015). To overcome this, coding schemes have been developed to help standardise and enhance the comprehensive reporting of theories used within intervention development (Painter et al. 2008, Michie & Prestwich 2010). Additionally, the incorporation of theory into the intervention development process can be facilitated by using theory-centred approaches, which enable systematic identification of theory and evidence to guide the development and evaluation of complex interventions.

Interventions may improve healthcare at four levels: 1) individual healthcare professional level, 2) healthcare group or team level, 3) organisational level e.g., an NHS Trust and 4) the overarching healthcare system an organisation is embedded (Ferlie & Shortell 2001). Interventions aimed at each level may be best developed using different theories, for example interventions aimed at individual healthcare professionals may best be developed through theories of individual behaviour change. In contrast, interventions aimed at NHS Trust level may best be developed through organisational change theories (Eccles et al. 2005). As this thesis is interested in changing nurses' behaviour to improve therapeutic engagement, it was deemed appropriate that the intervention should be rooted in a theory of individual behaviour change.

3.4.1 Theories of Behaviour Change

It is increasingly recognised that the development of behaviour change interventions should draw on theories of behaviour and behaviour change (Craig et al. 2008, Michie et al. 2008). Behaviour change theories aim to explain the when, why and how of behaviour, and identify the many influencing factors that interventions should target to modify behaviour. They must also elucidate the relevant mechanisms of action that may bring about change (Michie et al. 2014). This advances our understanding of what works and why, which may lead to further refinement, and more robust interventions (Michie et al. 2008). However, choosing an appropriate behaviour change theory can be challenging due to the number of available explanatory theories (French et al. 2012).

A review of all these theories is beyond the scope of this thesis. Previously conducted reviews have identified 82 theories relevant to a myriad of behaviours (e.g., increasing physical activity, safe sex practices, smoking cessation) (Davis et al. 2015). Another systematic review of behaviour change theories identified 100 theories that explained behaviour change through five interlinked mechanisms of action: motives, self-regulation, psychological and physical resources, habits and environmental and social influences (Kwasnicka et al. 2016). While any of these theories may be useful in explaining determinants of change, they are composed of many similar or overlapping constructs, which creates difficulty in deciphering the key determinants of change (Michie et al. 2014). To give an example, three particularly notable behaviour change theories are Ajzen & Fishbein's (1991) Theory of Reasoned Action, Bandura's Social Cognitive Theory (1997) and Operant Learning Theory (Skinner, 1963). These theories can be used to explain the determinants of change; however, they have many overlapping constructs such as intention to change, personal and environmental capability to change, beliefs and attitudes towards change and social and professional role identity. Further, no one theory contains all constructs (Fishbein 2000, Michie et al. 2008). Therefore, the use of one theory over the other is difficult to justify.

As well as having overlapping constructs, most behaviour change theories or frameworks offer little guidance when mapping theory with behavioural change strategies (Grol et al. 2013). Several attempts have been made to develop frameworks that identify intervention options and ways of selecting these. Prominent examples include MINDSPACE (Institute for Government 2009), which has been used by the UK Government and Intervention Mapping (Bartholomew-Eldredge et al. 2016), which is used internationally. However, these frameworks do not cover the full range of available intervention options, and similar to the theories, no framework offers a comprehensive range of options for developers to choose from (Michie et al. 2014). There is also ambiguity in the identification of appropriate behavioural change techniques (BCTs) (Michie et al. 2008). This is important as BCTs are characterised as the active ingredients of an intervention (Michie et al. 2014) and characterising behaviours by BCTs clarifies which interventions are more or less effective (Michie et al. 2009, West et al. 2010). A more systematic and robust guidance for identifying and assigning intervention options and BCTs is required, particularly for those who are new to the field of complex intervention development (Michie et al. 2008).

Eccles and colleagues (2005) have produced a criterion of desirable attributes that should be considered when developing behaviour change interventions at an individual healthcare professional, healthcare group or healthcare team level. They suggest that theories should:

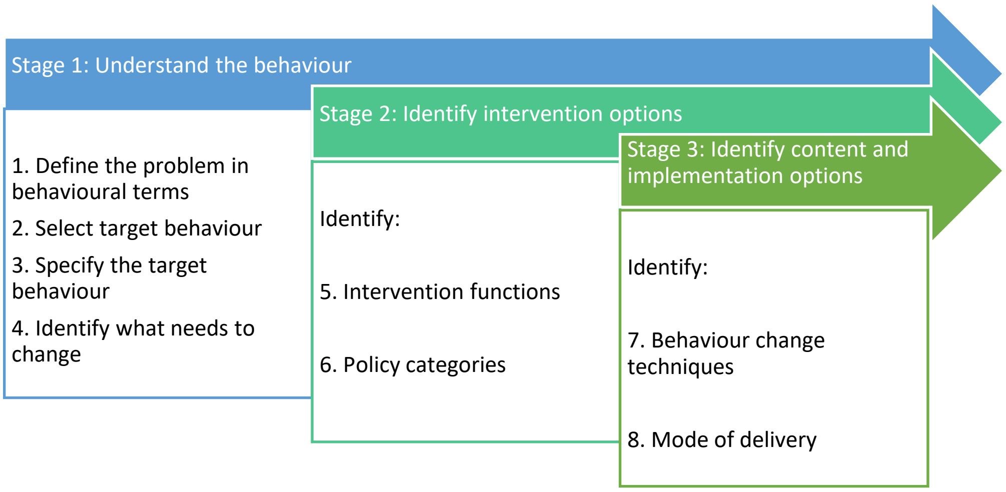
1) Have demonstrated effectiveness in predicting and explaining behaviour change in other settings
2) Explain behaviour in terms of factors that are changeable (e.g., knowledge, beliefs, attitudes) rather than factors that cannot be changed (e.g., age, personality)
3) Enable examination of factors external to the individual (e.g., patient preference, organisational barriers)

A programme of research from Michie and colleagues (Cane et al. 2012, Michie et al. 2013, Michie et al. 2014) may meet the above criteria and address the aforementioned challenges (i.e., overlapping constructs, incomprehensive, inability to map theory with BCTs). A discussion of this work, how it addresses the above criteria and challenges - and how it is applied to this thesis - will now be presented.

3.5 A comprehensive guide to designing behaviour change interventions

Michie and colleagues' work brings together 33 behaviour change theories (Cane et al. 2012) and 19 frameworks (Michie et al. 2014) to create comprehensive tools and a systematic guide for characterising and designing behaviour change interventions. The approach describes eight steps within three overarching stages that intervention designers can follow to design behaviour change interventions (Figure 5).

Figure 5 – The behaviour change intervention design process (adapted from Michie et al. 2014)

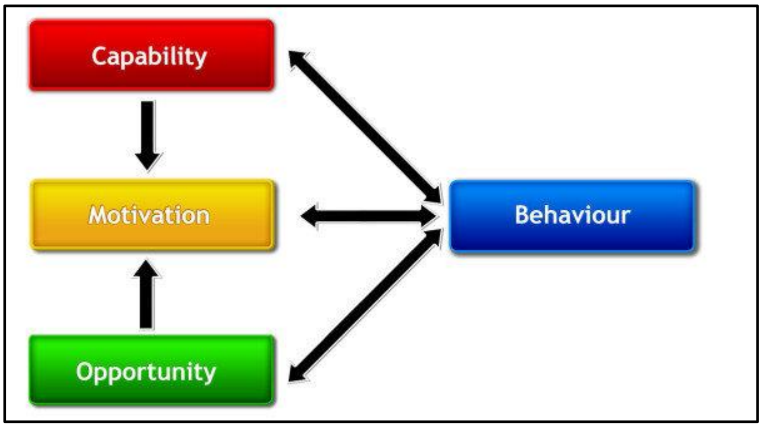


The process is described in linear terms; however, it is recognised that an iterative, flexible approach may be required when applying this process to intervention design (Michie et al. 2014). It has been used in many settings including mental health (Mangurian et al. 2017), diabetes (Moore et al. 2019), smoking cessation (Gould et al. 2017), healthy workplace practices (Ojo et al. 2019) and hand hygiene (Perry et al. 2015). Stage one lays the groundwork for intervention development and concentrates on conducting a "behavioural diagnosis". This includes defining, selecting and specifying the target behaviour(s), whilst identifying factors that may influence those behaviours. Stage two and three connects the behavioural diagnosis to a systematic and evidence-based intervention design process, where the content and active ingredients of the intervention are identified and developed. The specific tools and models within this process will now be presented.

3.5.1 The COM-B model

The COM-B model suggests that people must possess sufficient capability (C), opportunity (O) and motivation (M) to perform a behaviour (B). The model provides a straightforward starting point for understanding behaviours in context (Michie et al. 2014). Capability includes an individual's psychological (knowledge and skills) and physical (strength and stamina) ability to engage in a behaviour; opportunity includes both the social (cultural milieu) and physical (resources) factors that lie outside an individual which enable or prompt a behaviour; and motivation includes both reflective (e.g., conscious and analytical decision-making) and automatic (e.g., habits or emotions) brain processes that direct a behaviour (Michie et al. 2011a, 2014). These behavioural influences interact to create behaviours, as shown in Figure 6.

Figure 6 – The COM-B Model (Michie et al. 2011a, 2014)



When desired behaviours do not occur, or undesired behaviours do occur, an analysis of the factors that influence behaviour is required to understand what needs to change to enable the desired behaviours. This is an important first step when developing interventions (Michie et al. 2014). When considering therapeutic engagement, The COM-B model can be used to highlight factors that may influence engagement in practice, for example administrative tasks that draw nurses away from one-to-one patient contact (opportunity) or the anxiety that some nurses feel towards engagement, often due to lack of skills (capability) or burnout (motivation). When considering the most commonly used intervention to improve therapeutic engagement, Protected Engagement Time (as discussed in Chapter 2, 2.2.6), it is clear to see that although nurses' opportunity to engage is addressed by protecting the time they have to spend with service users, little is done to address either their capability or motivation to engage. This highlights the benefits of using a comprehensive theory of behaviour to understand and identify all potential influences on behaviour.

3.5.2 The Theoretical Domains Framework

As discussed in section 3.4, there is no single theory that explains or predicts behaviour across contexts. Consequently, researchers have begun to develop comprehensive frameworks that move away from single theory-based approaches to behaviour change. To better understand what components of an intervention work in what contexts, research argues that a supra-theory framework may be useful to enable the identification of all constructs relevant to behaviour change and maintenance across varying contexts (Greenhalgh et al. 2004, Eccles et al. 2007). Using expert consensus methods and systematic reviews of behavioural change theories, the Theoretical Domains Framework (TDF) (Cane et al. 2012) simplifies and amalgamates 33 behaviour theories and 128 theoretical constructs that may influence behaviour change. The original framework grouped these constructs into 12 discreet domains of similar theoretical constructs (Michie et al. 2005). A more recent, updated TDF has now identified 14 theoretical domains (Cane et al. 2012) (Table 3). The COM-B model plays a crucial role in determining what needs to be addressed for one to change their behaviour and was developed around the same time as the second iteration of the TDF. The most recent TDF domains have been mapped to the COM-B model to enable a more detailed behavioural diagnosis (Michie et al. 2014).

Table 3 – TDF domains and definitions, linked to the COM-B model (adapted from Michie et al. 2014)

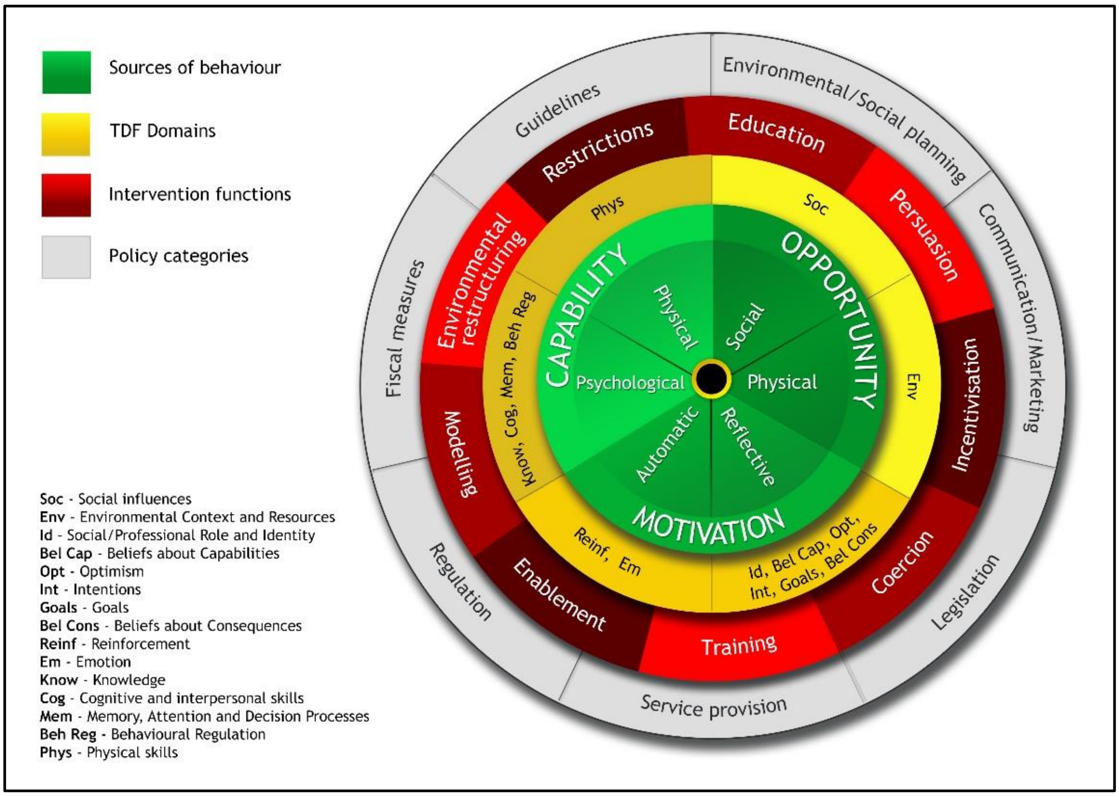
COM-B	TDF domains	Definition
Capability	Skills	An ability or proficiency acquired through practice (skills, skills development, competence, ability, practice, skill assessment)
	Knowledge	An awareness of the existence of something (including knowledge of condition/scientific rationale, procedural knowledge, knowledge of task environment)
	Memory, attention, decision	The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives (memory, attention, attention control, decision making, cognitive overload/tiredness)
	Behavioural regulation	Anything aimed at managing or changing objectively observed or measured actions (self-monitoring, breaking habit, action planning)
Opportunity	Social influences	Those interpersonal processes that can cause individuals to change their thoughts, feeling, or behaviours (social pressure, social norms, group conformity, social comparisons, groups norms, social support, power, intergroup conflict, alienation, group identity, modelling)
	Environment context and resources	Any circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence, and adaptive behaviour (environmental stressors, resources/material resources, organisational culture/climate, salient events/critical incidents, person x environment interaction, barriers and facilitators)
Motivation	Beliefs about capabilities	Acceptance of the truth, reality, or validity about an ability, talent, or facility that a person can put to constructive use (self-confident, perceived competence, self-efficacy, perceived behavioural control, beliefs, self-esteem, empowerment, professional confidence)
	Beliefs about consequences	Acceptance of the truth, reality, or validity about outcomes of a behaviour in a given situation (beliefs, outcome expectancies, characteristics of outcome expectancies, anticipated regret, consequents)
	Social/professional identity	A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting (professional identity, professional role, social identity, identity, professional boundaries, professional confidence, group identify, leadership, organisational commitment)
	Optimism	The confidence that things will happen for the best or that desired goals will be attained (optimism, pessimism, unrealistic optimism, identity)

	Intentions	A conscious decision to perform a behaviour or a resolve to act in a certain way (stability of intentions, stages of change model, trans theoretical model and stages of change)
	Goals	Mental representations of outcomes or end states that an individual wants to achieve (goals (distal/proximal), goal priority, goal/ target setting, goals (autonomous/controlled), action planning, implementation intention)
	Reinforcement	Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus (rewards (proximal/distal, valued/not values, probable/improbable), incentives, punishment, consequents, reinforcement, contingencies, sanctions)
	Emotion	A complex reaction pattern, involving experiential, behavioural, and physiological elements, by which the individual attempts to deal with a personally significant matter or event (fear, anxiety, affect, stress, depression, positive and negative affect, burn-out)

3.5.3 The Behaviour Change Wheel

The COM-B model is at the core of a larger framework called the Behaviour Change Wheel (BCW) (Michie et al. 2014). The BCW was developed through a systematic review that identified 19 separate behaviour change frameworks previously used to develop interventions (Michie et al. 2011a). These frameworks were brought together to develop a comprehensive and systematic guide for characterising and designing behaviour change interventions (Michie et al. 2014) (Figure 7).

Figure 7 – The Behaviour Change Wheel



The BCW provides a systematic way to move from stage one: understanding the behaviour, to stage 2: identifying intervention options. The BCW maps the COM-B model and TDF domains to nine intervention functions of which an intervention may change behaviour. These are shown in red in Figure 7 and described in Table 4.

Table 4 – Intervention functions (adapted from Michie et al. 2014)

Intervention Functions	Description
Education	Increasing knowledge or understanding
Persuasion	Using communication to induce positive or negative feelings or stimulate action
Incentivisation	Creating an expectation of reward
Coercion	Creating an expectation of punishment or cost
Training	Imparting skills
Restriction	Using rules to reduce the opportunity to engage in the target behaviour (or to increase the target behaviour by reducing the opportunity to engage in competing behaviours)
Environmental restructuring	Changing the physical or social context
Modelling	Providing an example for people to aspire to or imitate
Enablement	Increasing means/ reducing barriers to increase capability (beyond education and training) or opportunity (beyond environmental restructuring)

Although the links between the COM-B model, TDF domains and intervention functions have been identified through an expert consensus exercise, the links are not exhaustive and may be context dependent (Michie et al. 2014). For example, an individual's capability to enact a certain behaviour could be addressed through the function of training or enablement. Each intervention function was evident in at least one of the 19 frameworks that make up the BCW and were intentionally broad as it was recognised that an intervention strategy may contain more than one function (Michie et al. 2011a). None of the 19 frameworks that make up the BCW included all intervention functions, thus further highlighting the comprehensive nature of the BCW over other behaviour change frameworks (Michie et al. 2011a).

In addition to intervention functions, the BCW also provides designers with seven policy categories which may support the delivery of intervention functions. Each policy category was evident in at least one of the 19 identified frameworks and include: Communication/marketing, Guidelines, Fiscal measures, Regulation, Legislation, Environmental/social planning and Service provision (described in Table 5).

Table 5 – Policy categories (adapted from Michie et al. 2014)

Policy categories	Description
Communication/ marketing	Using print, electronic, telephonic or broadcast media
Guidelines	Creating documents that recommend or mandate practice. This includes all changes to service provision
Fiscal measures	Using the tax system to reduce or increase the financial cost
Regulation	Establishing rules or principles of behaviour or practice
Legislation	Making or changing laws
Environmental/ social planning	Designing and/ or controlling the physical or social environment
Service provision	Delivering a service

3.5.4 *The Behaviour Change Technique Taxonomy*

Stage 3 of the behaviour change intervention design process (as shown in Figure 5) requires the identification of intervention content and implementation options by choosing relevant BCTs and modes of delivery (Michie et al. 2014). The active ingredients of behaviour change interventions are often reported using different labels, for example monitoring one's behaviour may be labelled as keeping a daily diary or recording behaviour on a chart. One label may be associated with several techniques, for example behavioural counselling may include education, feedback and reinforcement (Michie et al. 2008). The lack of a standardised language to specify and report BCTs leads to confusion, difficulty in replicating the intervention and an inability to accumulate evidence across interventions (Abraham & Michie 2008, Michie et al. 2013). Over the past decade, there has been considerable advances in the methods for characterising intervention content. BCTs have been identified for specific types of interventions, such as smoking cessation (Michie et al. 2011b), diet and exercise (Michie et al. 2009) and changing health professional's behaviour (Ivers et al. 2012). The first generally applicable BCT taxonomy was developed through content analysis of 221 behaviour change intervention descriptions and intervention manuals. This identified 26 BCTs that were broadly applicable to interventions in many settings (Abraham & Michie 2008). It has now been widely used to design and report interventions (e.g., Cahill et al. 2008, Gardner et al. 2010).

This taxonomy has been further developed to improve the reliability of the original taxonomy and increase the range of BCTs. This has resulted in the creation of the Behaviour Change Technique Taxonomy version 1 (BCTTv1) (Michie et al. 2013). The BCTTv1 is an extensive taxonomy of 93 distinct BCTs that enables intervention designers to choose the potentially active ingredients of their interventions. By using a published mapping approach, the BCTTv1 links with the intervention functions and behavioural constructs of the BCW, TDF domains and COM-B model (Cane et al. 2012, Michie et al. 2014, Cane et al. 2015, Carey et al. 2019, Connell et al. 2019). It has been used to specify BCTs across a wide range of settings, for example physical activity (Howlett et al. 2015), alcohol use (Michie et al. 2012), medication adherence (Kahwati et al. 2016), and behaviour of health professionals (McHugh et al. 2018). It has also been applied in evidence syntheses to retrospectively identify BCTs used in published interventions and to evaluate their efficacy (Alkhaldi et al. 2016).

3.5.5 The APEASE criteria

When developing an intervention there are many factors that must be considered to ensure the intervention will be effective and fit for purpose. Evaluation of factors such as the social and environmental context are as important as considering the intervention’s effectiveness, therefore Michie and colleagues (2014) developed the APEASE (Affordability, Practicality, Effectiveness, Acceptability, Side effects, Equity) criteria (detailed in Table 6) to encourage intervention designers to ask questions of their potential intervention components and make strategic judgements about the most appropriate content for the intervention. This can be done when deciding on intervention functions, policy categories, BCTs and mode of delivery. Further details of how the APEASE criteria was applied in this PhD study is provided in Chapter 6, paper 3.

Table 6 – The APEASE criteria for designing and evaluating interventions (Michie et al. 2014)

Criterion	Description
Affordability	Interventions often have an implicit or explicit budget. It does not matter how effective, or even cost-effective it may be if it cannot be afforded. An intervention is affordable if within an acceptable budget it can be delivered to, or accessed by, all those for whom it would be relevant or of benefit.
Practicability	An intervention is practicable to the extent that it can be delivered as designed through the means intended to the target population. For example, an intervention may be effective when delivered by highly selected and trained staff and extensive resources but in routine clinical practice this may not be achievable.
Effectiveness and cost-effectiveness	Effectiveness refers to the effect size of the intervention in relation to the desired objectives in a real-world context. It is distinct from efficacy which refers to the effect size of the intervention when delivered under optimal conditions in comparative evaluations. Cost-effectiveness refers to the ratio of effect (in a way that has to be defined and taking account of differences in timescale between intervention delivery and intervention effect) to cost. If two interventions are equally effective, then clearly the most cost-effective should be chosen. If one is more effective but less cost-effective than another, other issues such as affordability, come to the forefront of the decision-making process.
Acceptability	Acceptability refers to the extent to which an intervention is judged to be appropriate by relevant stakeholders (public, professional and political). Acceptability may differ for different stakeholders. For example, the general public may favour an intervention that restricts marketing of alcohol or tobacco but politicians considering legislation on this may take a different view. Interventions that appear to limit agency on the part of the target group are often only considered acceptable for more serious problems [17].
Side-effects/ safety	An intervention may be effective and practicable but have unwanted side-effects or unintended consequences. These need to be considered when deciding whether or not to proceed.
Equity	An important consideration is the extent to which an intervention may reduce or increase the disparities in standard of living, wellbeing or health between different sectors of society.

3.5.6 Critical evaluation of the BCW approach

It is recognised that there may be near infinite ways to categorise interventions and their functions and identify BCTs. Research has shown that there may be many more BCTs that are yet to be identified (Hardcastle et al. 2017). As such, the BCW and accompanying BCTTv1 should be thought of as a foundation to build future work from, rather than a completed piece of work (Michie et al. 2011a). Despite this, the BCW and BCTTv1 offer the first systematically developed, comprehensive framework that specifically addresses the limitations of other frameworks (West et al. 2019). The Human Behaviour Change Project (Michie et al. 2017) is a continuous programme of work that aims to further improve the integration and synthesis of theories of behaviour change and will provide intervention designers with key information on "what intervention(s) work, compared with what, how well, with what exposure, with what behaviours, for how long, for whom, in what settings and why".

This work involves the development of an overarching Behaviour Change Intervention Ontology (Michie et al. 2020) and builds on the BCTTv1 and other work that links BCTs with their mechanisms of action. Often the rationale for the selection of BCTs is not always clear as we still lack a thorough understanding of the links between BCTs and specific mechanisms of action (Carey et al. 2019). Therefore, to further enhance the design of effective interventions, an understanding of the mechanisms of action through which a BCT may bring about change is needed (Michie et al. 2018, Carey et al. 2019, Connell et al. 2019, Johnston et al. 2020). Mechanisms of action are constructs identified in behaviour change theory that can mediate the effects of an intervention (Carey et al. 2019). They can be characteristics of the individual (e.g., knowledge, skills, or an individual's beliefs about their own capabilities) or characteristics of the social and physical environment (e.g., available resources). So far this work has used a literature synthesis (Carey et al. 2019), expert consensus (Connell et al. 2019) and a triangulation study (Johnston et al. 2020) to create the Theory and Techniques tool (found here: https://theoryandtechniquetool.humanbehaviourchange.org/tool). This tool enhances the BCW approach by making explicit the links between 74 BCTs and 26 mechanisms of action.

Another important aspect of intervention development is to involve key stakeholders within the development process (O'Cathain et al. 2020b). When this has been done, it is found to improve intervention effectiveness and make interventions more relevant to the people who both use and receive them (van Meijel et al. 2004). NICE (2014) released guidance that focused on individual level behaviour change interventions which recommends a person-centered approach to intervention development. The BCW does not offer guidance on how to involve service users, carers or clinicians within the intervention design process. To overcome this limitation, this thesis uses the BCW to guide intervention development within a co-design process, discussed further in section 3.7 of this chapter.

3.5.7 Applying the BCW to this study

Phase 1 and 2a of this PhD broadly followed the three stages of the BCW approach: 1) understand the behaviour, 2) identify intervention options and 3) identify content and implementation options. More specifically, the BCW, including the COM-B model and TDF domains were used in Phase 1 to examine the influences on nurse-patient therapeutic engagement as part of the systematic integrative review (Chapter 4, paper 1). They were also used in Phase 2a to guide and analyse interviews with service users, carers and clinicians (Chapter 5, paper 2). Those influences were then linked to the BCW intervention functions (Chapter 6, paper 3). The BCTTv1 and intervention function matrix published in Michie et al. (2014) was used to identify BCTs deemed suitable for the intervention (Chapter 6, paper 3). The Theory and Techniques tool, which links 74 BCTs and 26 mechanisms of action (as discussed above) was not produced in time to be used during the intervention development phase (Phase 2a) of this study; however, it was used to understand the behavioural mechanisms behind how the co-design process may work, in Phase 2b (Chapter 7, paper 4). Phase 2b also used the BCW and BCTTv1 to identify the behaviour change techniques related to the co-design process (Chapter 7, paper 4).

3.6 Involving others in research

There is ongoing debate as to how to better engage service users, carers and clinicians in intervention design, with recognition that many challenges in improving healthcare services are behavioural in nature (NHS 2014, Mental Health Task Force 2016). Healthcare interventions exist within a complex, adaptive system (Greenhalgh et al. 2004), thus it is vital to gain an understanding of how the agents of a healthcare system – i.e., clinicians, patients, carers and others working within the organisation – interact and interconnect both with each other and with the wider system they exist in (Murray et al. 2010). The MRC Framework and BCW do not specify how or when stakeholders should be involved in the intervention development process. There is recognition that involving service users, carers and clinicians as active partners in intervention development enhances the process in many ways (Dentzer 2013). As discussed in Chapter 1, the aspiration from the beginning of this PhD was to use a collaborative, participatory approach to intervention design. However, enabling genuine participation can be difficult (Reason 1994), particularly in a mental health setting, as discussed in Chapter 2, section 2.3. One such process that aims to overcome the barriers to involvement is Experience-based Co-design (EBCD) (Bate & Robert 2007). The next section will explore EBCD and its application to this study.

3.6.1 A brief history of design thinking

Broadly speaking, co-design approaches use collaborative methods to identify and develop solutions to shared problems and are used to enhance the design and delivery of public services (Osborne et al. 2016). Born from the idea that to improve a system, those who use it must also play a vital role in designing it, co-design is rooted in the participatory design movement that began in Scandinavia in the 1970s (Robert et al. 2020). Participatory design was first recognised within the field of computer science, in collaboration with the trade union movement and aimed to bring about industrial democracy for workers (Floyd et al. 1989, Schuler & Namioka 1993). Design thinking became central to many business strategies, although its application in this context was criticised for being too simplistic (Johansson-Sköldberg et al. 2013). A development within the field was the recognition that drawing upon direct user experience – in addition to simply user testing – may be beneficial. From this stemmed user-centred design, which adopted a more humanistic approach, including role playing, design games and prototyping (Holmlid 2009). This broadened the application of design thinking to other areas such as service design (Robert et al. in press).

Service design places the customer's experience at the centre of the design process. It is a creative, iterative approach (Meroni & Sangiorgi 2011) that draws from a range of methods and tools such as ethnography, information science and interaction design (Robert et al. 2020). In contrast to participatory and user-centred design, service design recognises the importance of collaboration with all users of a service, rather than just the "end user" (Di Russo 2012). Participatory and collaborative approaches to design have been applied in a number of disciplines, including healthcare (Tsekleves & Cooper 2017), but placing emphasis on user participation, rather than simply staff participation remains a relatively new development in this context (Bate & Robert 2007). One example that aims to involve service users and staff as equal and active design partners is that of Experience-based Co-design, which was developed within and for the NHS (Bate & Robert 2007).

3.7 Experience-based Co-design

When developing EBCD, Bate and Robert (2007) recognised that although the Department of Health's *The NHS Plan* of that time aimed to reform and re-design healthcare services around the patient (DH 2000), subsequent re-design initiatives still largely focused around staff needs, rather than patient needs (DH 2005). To realign healthcare design with what patients wanted and needed, an alternative approach was required; one that utilised the relatively unexplored area of service user experience (Bate & Robert 2006). From this, the idea of EBCD was born.

EBCD is a structured, participatory approach that aims to understand and design service improvements based on the collective experiences and expertise of service users, carers and clinicians. The EBCD approach draws from four overlapping theoretical strands (Robert 2013):

1) Narrative-based approaches to change
2) Participatory action research (PAR)
3) Learning theory
4) User-centred design

These culminate in a cyclical and systematic process of exploration, knowledge construction and action, as shown in Figure 8. Traditionally EBCD was used as a local service improvement method e.g., Springham & Robert (2015) or Tsianakas et al. (2012), however more recently it has been recognised as an approach for co-designing patient-centred interventions, thus informing the development phase of the MRC Framework e.g., Raynor et al. (2020) or Tsianakas et al. (2015). Within this thesis, EBCD will be used for the latter, to co-design an intervention to improve the quality of nurse-patient engagement on acute mental health wards.

Figure 8 – EBCD cycle (Donetto et al. 2014)

3.7.1 Underpinning theory of EBCD

Before describing the six stages of EBCD in more depth, the four theoretical strands of EBCD will be examined in relation to EBCD's constituent parts, these being "experience-based", "co" and "design".

3.7.1.1 "Experience-based"

Following others, Bate & Robert (2006) propose that good design consists of three components:

1) Performance (how well a product does the job)
2) Engineering (how safe and reliable a product is)
3) The aesthetics of experience (how it feels to interact with a product)

Healthcare has a long history of designing products and processes that focus on these first two components – performance and engineering – but the third component is only a relatively new introduction to healthcare (Bate & Robert 2006). Integral to the EBCD process is the unique contribution of service user, carer and staff experiences (Bate & Robert 2007). Of importance, particularly in relation to this thesis, is that experience guides behaviour (Bate & Robert 2006), therefore individual experiences must be considered when developing behaviour change interventions.

A narrative-based approach to change is one of four theoretical strands of EBCD. Narrative-based approaches use storytelling to capture both the experiences and the meaning of those experiences to the individual (Bate & Robert 2007). Although sometimes criticised for being too subjective, it is argued that the subjective experiences of clinicians and service users are essential to highlight what does and does not work within a service, and how this can be improved (Coulter et al. 2014). The informal nature of storytelling enables participants to describe experiences using their own language (Bate & Robert 2007). This is important, particularly in healthcare where jargon and professional terminology can create a barrier between healthcare services and members of the public and restricts the ability of people to confidently participate in change initiatives (Turner & Beresford 2005). Storytelling may realign the power imbalances between service users, carers and clinicians, which is important in mental health settings, where entrenched hierarchies have been a persistent problem for many years (Beresford et al. 2016, Farr 2018). EBCD studies conducted in mental health settings have demonstrated the powerful impact that storytelling has to stimulate discussions that lead to change ideas relevant to both those who use and deliver the service (e.g., Larkin et al. 2015, Springham & Robert 2015, Mulvale et al. 2020).

Narrative interviews with clinicians and filmed narrative interviews with service users and carers capture “touchpoints” – intensely personal points that highlight the individual’s key moments or events that influence their overall experience of delivering or receiving a service (Bate & Robert 2007). Touchpoints may relate to a wide range of experiences. EBCD projects conducted on acute mental health wards have found touchpoints relating to both the physical environment (e.g., difficulties arising from restrictive practices) (Boden et al. 2018) and emotional and relational processes (e.g., lack of staff-patient contact) (Larkin et al. 2015). Individual touchpoints are grouped into themes and the filmed interviews are edited to showcase these themed touchpoints in a “trigger film”. The film is shown to staff at the joint co-design event, which ensures the service user voice is heard and enables staff to understand how service users and carers experience their service. This then stimulates discussion around service improvement (Point of Care Foundation 2020) and specifically in this thesis, will be used to discuss where behaviour change could occur.

Another way of understanding experience is through observation. Situated in the ethnographic roots of EBCD, observations provide unique insight into the ways in which staff and service users interact in a given environment (Bate & Robert 2007), which is particularly important in a study that aims to improve nurse-patient engagement. Observations can uncover discrepancies between the things that people say compared to what they do and may reveal touchpoints that would otherwise be unconsidered (Bate & Robert 2007). Importantly, observations can also help to engage staff in the EBCD process (Donetto et al. 2014).

3.7.1.2 "Co"

A vital aspect of EBCD is collaboration (Bate & Robert 2006, Locock et al. 2014). Originally called Experience-based Design, "co" was introduced to emphasise the partnership and shared leadership that is required between service users, carers and clinicians (Bate & Robert 2007). The "co" of EBCD is rooted within participatory action research (PAR); another theoretical strand of EBCD. PAR is characterised by a collective, shared commitment for researchers and participants to build alliances that enable them to engage in investigation, reflection and action that results in change (Baum et al. 2006, Robert 2013). Early action research was criticised both for lacking rigour and being disempowering for participants, however it has now gained acceptance within the healthcare sector, particularly in mental health, where the "survivors' movement" demanded that the service user voice be present in the planning and delivery of healthcare services (Baum et al. 2006). Importantly in EBCD, service users are not required to be design or healthcare experts, rather their expertise comes from the unique knowledge they possess from having firsthand experience of a service (Bate & Robert 2007).

When services users, carers and clinicians come together in the co-design workshops, the aim is that by engaging in collective investigation, reflection and action (i.e., PAR principles) roles and expectations can be negotiated that results in action and change that accounts for the needs of all participants, rather than just the needs of clinicians, or just the needs of service users and carers (Bate & Robert 2007). Closely related to this is another theoretical strand of EBCD – learning theory. Learning theory is a sister process to narrative-based approaches to change and in the context of EBCD is underpinned by the belief that past experiences can be used to understand and shape future experiences (Bate 2007). In EBCD this learning is a collaborative process that requires individuals to be open to other perspectives, which enables the production of new ideas that can be used as an agent for change (Kerr & Lloyd 2008).

3.7.1.3 "Design"

The final theoretical strand of EBCD is user-centred design. User-centered design focuses on experiences and is characterised by the collaborative partnership between service user and service provider to design experiences of care rather than systems of care (Robert 2013). It offers methods and tools such as prototyping and iterative testing, which are relatively new to the area of healthcare improvement (Robert 2013) yet can help address the MRC Framework's modelling phase (Craig et al. 2008). This occurs during the co-design phase of the EBCD approach, where service users, carers and clinicians meet and create joint priorities for improvement, based on the experiences they shared in their narrative interviews. Service improvements (or interventions) are then collaboratively designed, based on these joint improvement priorities that stemmed from their collective experiences (Point of Care Foundation 2020). Service users, carers and clinicians act as the main drivers for change, with their lived experience, expertise and knowledge underpinning their collaboration. This ensures that a user-centred design approach is retained throughout the lifespan of the project (Bate & Robert 2007).

3.7.2 Overview of the EBCD process

In its traditional form, the EBCD process, set out in a freely available online toolkit (Point of Care Foundation 2020), consists of six stages within two phases: the experience gathering phase and the co-design phase. The six stages are described below (Robert et al. 2015, Point of Care Foundation 2020):

Stage 1: Setting up

This stage lays the groundwork for the project and gets buy-in from key stakeholders. Site identification, ethical approvals, approaching and engaging gate keepers and recruiting participants occur during the project set up.

Stage 2: Engaging staff and gathering experiences

Non-participant observation within a service gives context and understanding. Approximately 12-15 semi-structured interviews with staff of all grades and roles are conducted. These interviews examine staff experience of a service or phenomena of interest. The interviews and observations are used to identify emotional touchpoints. Findings from the interviews are fed back to staff at a facilitated feedback event. Experiences and touchpoints are discussed, and priorities for improvement, based on the identified touchpoints are developed.

Stage 3: Engaging patients and gathering experiences

Approximately 12-15 service users and carers take part in filmed narrative interviews. These interviews explore the participants' experiences of a service or phenomena of interest. Touchpoints are identified from each individual interview and put into common themes. From this a 30-minute trigger film is produced that includes footage that best describes each touchpoint. A facilitated feedback event is held, where service users and carers review and discuss the film and identify any changes they feel necessary. An emotional mapping exercise is undertaken where service users and carers consider the impact of their touchpoints, and from this, priorities for improvement are developed.

Stage 4: Joint co-design event

Service users, carers and staff are invited to a facilitated joint event where they watch the trigger film and discuss their priorities for improvement, culminating in the development of shared priorities for improvement. Participants then split into groups of around 4-6 service users, carers and staff and start to plan solutions to their chosen improvement priorities.

Stage 5: Small co-design team meetings

Over the space of three to four months, each small group further develops, prototypes, tests and implements solutions to their chosen improvement priority.

Stage 6: Celebration event

Participants come together with others from their organisation to celebrate their successes and share their learning with others. The next stages of improvement work are planned, with the idea that the improvement cycle is continuous, rather than something that happens for just one project.

3.7.3 Critical evaluation of EBCD

Understanding the barriers and facilitators to implementing EBCD may be vital to its success (Dimopoulos-Bick et al. 2018). Several reviews and studies have been published that examine the strengths, limitations and challenges of the EBCD method (e.g., Donetto et al. 2014, Springham & Robert 2015, Mulvale et al. 2016, Dimopoulous-Bick et al. 2018, Green et al. 2020). Overall, experiences of using EBCD were mixed, however the strengths and limitations generally pertained to the same factors. Broadly speaking, the strengths included the democratic participation of service users, carers and clinicians, which breaks away from traditional paternalistic models of improvement (Iedema et al. 2010). The process was considered to be cathartic and empowering and fostered a feeling of shared ownership, through which service users, carers and staff were able to positively challenge their attitudes towards one another and use this to identify clear priorities for improvement (Tsianakas et al. 2012, Donetto et al. 2014). Another key strength was EBCD’s flexibility, however this flexibility meant that sometimes components identified as key in bringing about change were omitted from the process (Donetto et al. 2014, Dimopoulos-Bick et al. 2018, Green et al. 2020). An example of this is when studies fail to capture the service users’ narrative interviews on film, or not show a trigger film at the joint co-design event (e.g., Palmer et al. 2015).

Broadly speaking the challenges pertained to issues with staff and service user engagement, the complexity of the process and the amount of time and resources it required (Donetto et al. 2014). Engaging participants early and continuously through the lifespan of the project was considered important (Piper et al. 2010, Dimopoulos-Bick et al. 2018); however, this did not guarantee ownership over the work, which was vital for continued engagement to occur (Donetto et al. 2014). Feelings of ownership could be fostered by offering people a choice to participate (Bowen et al. 2013). In contrast, forcing people to participate was considered counterproductive (Point of Care Foundation 2020). Finding the time to explore and improve complex issues was sometimes considered unrealistic, particularly in busy inpatient environments or with participants who were acutely unwell (Iedema et al. 2010, Adams et al. 2013).

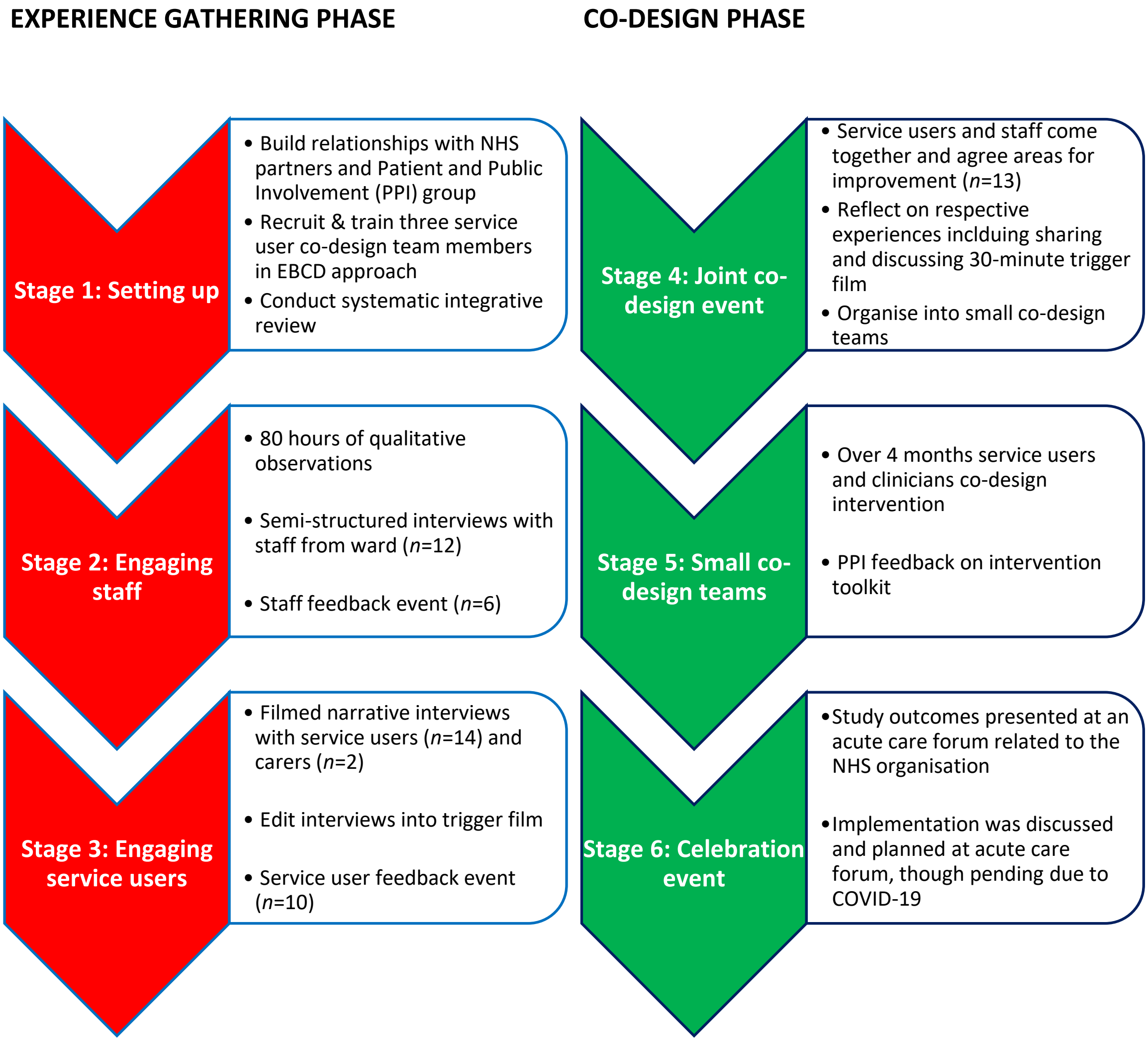
As discussed above, EBCD has evolved from being a local quality improvement method to a process for designing complex healthcare interventions (Tsianakas et al. 2015, Raynor et al. 2020). In their study that used EBCD to develop an intervention for managing medicines at transitions of care, Raynor and colleagues (2020) found that despite their success in engaging service users and staff across four NHS sites, none adopted the intervention beyond the duration of the study period. Thought must be given to implementation during the early phases of intervention development (Craig et al. 2008). Buy in from senior management may be vital to ensure uptake of the intervention (Raynor et al. 2020).

In relation to acute mental health settings, such as the one in this thesis, challenges relating to the equal distribution of power are pertinent. It is recommended that EBCD be modified to fit the unique needs of mental health service users; specifically considering power relations, potential vulnerabilities, anonymity and confidentiality (Larkin et al. 2015, Springham & Robert 2015, Cooper et al. 2016, Mulvale et al. 2016). Through discussions with my PPI group consisting of 10 mental health service users, it was decided that a “core” group of service users would be recruited before the commencement of the main study. This group would be trained in the EBCD approach and act as a support for the other service users and carers within the process. This idea was based on the work of ResearchNet at Oxleas NHS Foundation Trust, where service users and carers volunteer their time to conduct service improvement research within the Trust (Springham et al. 2011). In addition to my PPI group, members of ResearchNet were also consulted throughout the duration of this PhD. A “Lived Experience Co-Production Facilitator” who was part of ResearchNet was employed to facilitate the EBCD events undertaken in my project. It was hoped that this would help shift the power from clinician led processes traditional to mental health settings, to a more service user led process.

3.7.4 Applying EBCD to this study

As noted above, the flexibility of the EBCD approach is one of its strengths and it is not uncommon to see adaptations of the EBCD process (Donetto et al. 2014). Although we followed the six overarching stages of traditional EBCD, this study included adaptations within those six stages, based on my critical understanding of EBCD as an approach (see Figure 9 for the adapted version used in this study).

Figure 9 – Applying the EBCD approach in this PhD



- Build relationships with NHS partners and Patient and Public Involvement (PPI) group
- Recruit & train three service user co-design team members in EBCD approach
- Conduct systematic integrative review

- 80 hours of qualitative observations
- Semi-structured interviews with staff from ward (*n*=12)
- Staff feedback event (*n*=6)

- Filmed narrative interviews with service users (*n*=14) and carers (*n*=2)
- Edit interviews into trigger film
- Service user feedback event (*n*=10)

- Service users and staff come together and agree areas for improvement (*n*=13)
- Reflect on respective experiences incldiung sharing and discussing 30-minute trigger film
- Organise into small co-design teams

- Over 4 months service users and clinicians co-design intervention
- PPI feedback on intervention toolkit

- Study outcomes presented at an acute care forum related to the NHS organisation
- Implementation was discussed and planned at acute care forum, though pending due to COVID-19

The main reasons for these adaptations are as follows:

1) Further knowledge was needed to ensure the intervention would be rooted in evidence and be easily replicable. As such, a systematic integrative review (Chapter 4, paper 1) and

behaviour change theory was used to guide intervention development throughout the EBCD process

2) Extra consideration and support was required to overcome potentially negative and ingrained power dynamics evident within a mental health setting
3) Adaptations were needed in the conduct of some stages due to challenges encountered with engaging clinicians within the process
4) COVID-19 meant adaptations to the final stage of EBCD were necessary

The reasons for these adaptations will be discussed in more detail throughout this thesis, however an overview of EBCD as applied to this PhD study is given below to provide a brief context.

Stage 1: Setting up (Chapter 5 and 6)

This stage continued throughout the duration of my PhD since the study was developed externally to the research site. Initially the key gatekeepers at CNWL were apprehensive about becoming involved with the work due to constraints on their clinicians' time. However, this was overcome to varying degrees by supporting clinicians' time through resources from my NIHR research grant (discussed further in Chapter 6 and 9). A core co-design group that consisted of two service users and one carer were recruited and trained in the EBCD approach, so they could support other recruits throughout the EBCD process. This training was provided by the Point of Care Foundation.

Stage 2: Engaging staff and gathering experiences (Chapter 5 and 6)

Eighty hours of qualitative observations were conducted on one acute mental health ward at CNWL. In addition to the observations, 12 semi structured interviews with clinicians from the same ward were conducted. Interviews were guided by behaviour change theory. Results from this were fed back to clinicians at a feedback event, facilitated by a lived experience practitioner, expert in EBCD. From this a deeper understanding of how therapeutic engagement was experienced by clinicians on the ward was established. Through this, we identified touchpoints and developed clinician improvement priorities.

Stage 3: Engaging service users and gathering experiences (Chapter 5 and 6)

Semi structured interviews with 14 service users and 2 carers who had been an inpatient or cared for somebody who had been an inpatient at CNWL were conducted. Interviews were guided by the behaviour change theory. Results from this were fed back to service users and carers at a feedback event. This resulted in a deeper understanding of how therapeutic engagement was experienced by service users and carers at the Trust. From this we identified touchpoints and developed service user and carer improvement priorities.

The interviews were also filmed and turned into a 30-minute trigger film that captured the service users' and carers' most memorable experiences of therapeutic engagement. Initially I was unsure whether service users would feel comfortable having their experiences captured on film and shown to staff, particularly as they may have to be treated by these staff in future admissions. An accelerated version of EBCD, known as AEBCD, uses pre-existing service user and carer trigger films that can be found from the online archives at HealthTalk.org (HealthTalk 2019). In an evaluation of AEBCD, the use of pre-existing films was found to be as effective as traditional EBCD in stimulating discussion at the joint co-design event (Lockcock et al. 2014). However further inspection of this archive found the existing films did not represent experiences of therapeutic engagement, thus would not be practical to use within this PhD. In subsequent PPI meetings service users expressed a strong desire to partake in the filmed interviews, and a robust informed consent and confidentiality procedure was developed (discussed further in Chapter 5).

Stage 4: Joint co-design event (Chapter 6)

Service users and carers who were previously interviewed and clinicians from the acute ward came together in an event where the trigger film was shown, joint service user, carers and clinician improvement priorities were formulated and initial suggestions for the intervention were co-designed. Intervention design was guided by the behaviour change theory. It was anticipated that the same individuals who were interviewed would attend the co-design event. However due to management changes on the ward, the original co-design event had to be postponed. None of the clinicians who were originally interviewed could attend the rescheduled event, therefore another group of clinicians from the same ward were recruited into the study. Implications of this are discussed further in Chapters 6 and 9. This event was supposed to be facilitated by the lived experience practitioner; however, due to it being postponed, another time could not be found when relevant staff and the lived experience practitioner could attend together. Therefore, I co-facilitated the event with the help of another nurse researcher (discussed further in Chapter 6 and 9).

Stage 5: Small co-design teams (Chapter 6)

Traditionally in EBCD, small groups of around four to six service users, carers and clinicians continue with the co-design of service improvements. It was difficult to execute this stage in this study, as the clinicians were not able to dedicate the time needed to participate as fully as hoped. I attempted to overcome this by meeting individually with clinicians, then feeding back their input to the smaller groups of service users and carers that had successfully formed. Implications of this are discussed further in Chapters 6 and 9. This stage also involved a small group of service users and me eliciting feedback on the intervention prototypes from a patient and public involvement group at CNWL.

Stage 6: Celebration event (Chapter 6)

It was anticipated that we would hold an event that brought the service users, carers and clinicians who co-designed the intervention together with individuals from the wider Trust. Unfortunately, the COVID-19 pandemic occurred (which will be discussed further in Chapter 9); therefore, this event did not take place. Instead, some of the members of the co-design team were able to attend an acute care forum that was held just before the first national lockdown. This enabled us to share our work with others at the Trust (discussed further in Chapter 6 and 8).

3.8 Reporting of intervention development

As discussed in section 3.2.1 of this chapter, there are many approaches that can be taken to develop interventions (O'Cathain et al. 2019a). There is a need to understand the strengths and limitations of each approach to enable intervention developers to choose an approach that is likely to be effective in their context (Duncan et al. 2020). To ensure robustness, replicability and implementation into clinical settings, there is also the need to understand and improve the intervention development process (Duncan et al. 2020). Published guidance such as the MRC Framework (Craig et al. 2008) goes some way to guiding developers, however much additional information is required (Bleijenberg et al. 2018). Compared to intervention feasibility testing, evaluation and implementation, the development phase of the MRC Framework has remained relatively underdeveloped (Duncan et al. 2020), thus a more comprehensive and systematic approach to reporting intervention development is required. To address this, the Guidance for Reporting Intervention Development Studies in Health Research (GUIDED) has recently been developed (Duncan et al. 2020). GUIDED facilitates systematic and transparent reporting of the whole intervention development process and is the first guidance of its kind. Within Chapter 6 of this thesis GUIDED will be used to ensure that the intervention development process is reported in a systematic, comprehensive and transparent manner.

3.9 Rationale for the application of a combination approach

As this chapter has highlighted, intervention designers have a wealth of frameworks, theories, models and processes to guide intervention development. The MRC Framework provides an overview of the best approach to developing complex interventions, from identifying the existing literature all the way to implementation in 'real-world' settings (Craig et al. 2008). The BCW and accompanying BCTTv1 facilitates a theoretical examination of modifiable behaviours in context and an evidence-based identification of intervention content. It also enables interventions to be reported in enough detail to be both replicable and to draw assumptions about potential mechanisms of action (Michie et al. 2014). EBCD ensures that both the people who use and deliver the intervention are at the heart of its design (Bate & Robert 2007). Finally, reporting guidelines such as GUIDED (Duncan et al. 2020) enhance the reproducibility of intervention development processes in practice.

By combining these frameworks, theories, approaches and guidelines, this thesis addresses the limitations of using just one in isolation. Table 7 shows the links between each and sets out the implications of using the approaches for each chapter of the thesis. It also highlights the iterative nature of intervention development. Although each approach is set out as a linear process, there was considerable overlap between each step, stage and phase. Findings and outcomes from each stage within and between each approach would result in reconsideration of the assumptions made at previous stages. I went back and forth between the stages more than once to ensure the process was comprehensive, evidenced by the fact that some stages and steps feature in more than one chapter of the thesis.

Table 7 – Combination approach showing how theoretical (MRC and BCW) and partnership (EBCD) approaches to intervention design were applied in this study

MRC Framework phase	Behaviour Change Wheel phase	EBCD phase	Chapter	Implications for thesis
Problem identification and definition	Stage 1: Understanding the behaviours - Step 1: define the problem in behavioural terms	Phase 1: setting up	Chapter 6 (paper 3)	Evidence from research I conducted before this PhD (McAllister et al. 2017) was considered, alongside meetings with key stakeholders, including a PPI group and senior managers at the NHS Trust.
		Phase 2: gathering staff experiences	Chapter 4 (paper 1)	I conducted an integrative review (McAllister et al. 2019), that concpetualised nurse-patient therapeutic engagement on acute mental health wards.
		Phase 3: gathering service user experiences	Chapter 5 (paper 2) Chapter 6 (paper 3)	Semi-structured interviews and non-participant observations with service users and clinicians were conducted and results discussed in two feedback events, which further identified and developed the nature and problems relating to therapeutic engagement.
Identifying the evidence base*	Stage 1: Understanding the behaviours - Step 1: define the problem in behavioural terms		Chapter 2 (background)	I reviewed the nursing intervention literature and reported the findings in the background to this thesis. This included evidence from a recent systematic review (Hartley et al. 2019) on interventions to improve the therapeutic alliance between nurses and service users.
			Chapter 4 (paper 1)	I also conducted an integrative review examining how engagement has been defined in the literature and identified

MRC Framework phase	Behaviour Change Wheel phase	EBCD phase	Chapter	Implications for thesis
				factors that influence engagement from a service user and clinicians' perspective.
Identify and develop theory*	Stage 1: Understanding the behaviours - Step 4: identify what needs to change, using the COM-B model and TDF domains		Chapter 4 (paper 1)	From the outset, Michie and colleagues' (2014) theory of behaviour change was applied to the work of this PhD. The integrative review also developed theory relating to therapeutic engagement. This resulted in a conceptual model of nurse-patient engagement on acute mental health wards, which was used as part of the intervention. It was also used during the intervention development process to highlight what good quality engagement should look like, then understand where the intervention should target to bring about those behaviours in nurses. The integrative review also mapped factors that influence engagement to the COM-B model (Michie et al. 2014) and TDF domains (Cane et al. 2012), which was incorporated into the conceptual model of engagement.
Determine the needs	Stage 1: Understanding the behaviours - Step 2: Select target behaviours - Step 4: identify what needs to change (using the COM-B	Phase 2: gathering staff experiences Phase 3: gathering service user experiences	Chapter 5 (paper 2) Chapter 6 (paper 3)	Semi-structured interviews and non-participant observations with service users and clinicians were conducted that examined their experiences of engagement. The COM-B model and TDF domains were applied, to understand potential barriers and facilitators to engagement in practice.

MRC Framework phase	Behaviour Change Wheel phase	EBCD phase	Chapter	Implications for thesis
	model and TDF domains)			This information was fed back to the co-design team at feedback events. At these events, the co-design team developed improvement priorities they wanted the intervention to address.
		Phase 4: joint co-design event		A joint co-design workshop with service users and clinicians further refined the improvement priorities, resulting in four joint service user and clinician priorities for change.
Examine current practice and context	Stage 1: Understanding the behaviours - Step 3: specify target behaviours - Step 4: identify what needs to change (using the COM-B model and TDF domains)	Phase 2: gathering staff experiences Phase 3: gathering service user experiences Phase 4: joint co-design event	Chapter 5 (paper 2)	Non-participant observations of ward practice were conducted to understand how the clinical team engaged with service users in their care. This identified potential areas for intervention.
			Chapter 6 (paper 3)	The co-design team completed a written exercise at the joint co-design event that examined the joint priorities and associated behaviours in terms of who needs to perform the behaviour, what the person needs to do differently to achieve change and when, where, and with whom they will do it. They were also encouraged to design intervention strategies they thought relevant to each of the four priorities and its influencing factors.
	Stage 2: Identifying intervention options	Phase 5: small co-design teams		I retrospectively assigned BCTs to the participants' examples and selected further BCTs and intervention strategies not identified during the joint workshop.

MRC Framework phase	Behaviour Change Wheel phase	EBCD phase	Chapter	Implications for thesis
	- Step 5: Identifying intervention functions using BCW - Identify policy categories using the BCW			
	Stage 3: Identify intervention content and implementation options - Step 7: Identify BCTs (BCTTV1 and APEASE criteria) - Step 8: Identify mode of delivery			The APEASE criteria were used during small co-design team meetings to inform the choice of intervention strategies for each improvement priority based on affordability, practicability, effectiveness/cost effectiveness, acceptability, side effects/safety and equity.
Modelling processes and outcomes*	Stage 3: Identify intervention content and implementation options - Step 7: Identify BCTs (using the BCTTv1 and APEASE criteria) - Step 8: Identify mode of delivery	Phase 4: joint co-design event Phase 5: small co-design teams	Chapter 6 (paper 3)	I collated all the information gathered from each phase of the EBCD process, then retrospectively assigned the BCTTv1 to develop a preliminary prototype of the intervention. The prototype was further refined with the co-design team during a series of small co-design team meetings. The mechanisms behind how the intervention may work was displayed as a logic model (Table 4 in chapter 6). As stated above, the APEASE criteria were used during small co-design team meetings to inform the choice of intervention strategies for each improvement priority based on

MRC Framework phase	Behaviour Change Wheel phase	EBCD phase	Chapter	Implications for thesis
				affordability, practicability, effectiveness/cost effectiveness, acceptability, side effects/safety and equity.
			Chapter 8	A pre-post-test to evaluate the impact of the intervention and refine it based on any concerns was planned to take place. Due to COVID-19 only the pre-test was able to be conducted.
			Chapter 7 (paper 4)	A secondary objective of this PhD was to understand how EBCD itself may bring about behavioural change. I examined the behavioural mechanisms behind how EBCD may work and created a taxonomy of BCTs and mechanisms of action unique to EBCD.
Intervention design	Stage 3: Identify intervention content and implementation options - Step 7: Identify BCTs (using the BCTTv1 and APEASE criteria) - Step 8: Identify mode of delivery	Phase 5: small co-design team meetings	Chapter 6 (paper 3)	Iterative process that involved members of the co-design team and me coming together to refine the intervention prototype based on content, ingredients, intensity and dose. This included gaining feedback on the intervention prototype from a PPI group and senior management at the Trust and refining it accordingly. A full prototype of the intervention was reviewed and approved by all members of the co-design team.

MRC Framework phase	Behaviour Change Wheel phase	EBCD phase	Chapter	Implications for thesis
		Phase 6: celebration event		Work was presented at an Acute Care Forum where we celebrated the success of our work and liaised with senior leaders on potential options for implementation.

*extracted from original MRC Framework (Craig et al. 2008)

CHAPTER FOUR
PHASE 1: SYSTEMATIC INTEGRATIVE REVIEW

4.1 Chapter overview

The preceding chapters outlined the need to better understand and conceptualise therapeutic engagement through theory-driven, collaborative methods to guide intervention development. As recommended by the MRC framework for developing complex healthcare interventions, a review of the literature was conducted to define the healthcare problem, understand the context in which the problem sits and identify potential intervention targets (O'Cathain et al. 2019a). This chapter presents the resulting first publication from this PhD study: *Conceptualising nurse-patient therapeutic engagement on acute mental health wards: An integrative review* (McAllister et al. 2019).

Supplementary files 1, 2, 3 and 4 relating to this publication are presented in Appendix A of this thesis. Due to the limitations in journal word counts, at the end of this chapter an additional description and discussion of the methods used, including the rationale for conducting an integrative review and the decision-making process behind search term, database and quality appraisal tool selection is given. Additionally, an update to the published review is presented, which includes studies published after the initial search was run in 2018.

The study presented in this chapter is published in the following paper:

McAllister S., Robert G., Tsianakas V. & McCrae N. (2019) Conceptualising nurse-patient therapeutic engagement on acute mental health wards: An integrative review. *International Journal of Nursing Studies* **93**, 106-118. https://doi.org/10.1016/j.ijnurstu.2019.02.013

4.2 Published paper

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Conceptualising nurse-patient therapeutic engagement on acute mental health wards: An integrative review

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ABSTRACT

Objectives: The review aimed to 1) explore the constituents of nurse-patient therapeutic engagement on acute mental health wards; 2) map factors that influence engagement to the Theoretical Domains Framework and 3) integrate results into a conceptual model of engagement to inform the development of interventions to improve engagement.

Design: A systematic integrative review using an established framework specific to the integrative review methodology.

Data sources: Database searches (CINAHL, PsycINFO, BNI and Cochrane Library) and hand searching identified 3414 articles. After screening, applying eligibility criteria, and quality appraisal, 37 articles were included: $n = 27$ empirical research studies, $n = 10$ expert opinion pieces, $n = 1$ case study and $n = 1$ theoretical report.

Review methods: Peer-reviewed empirical studies, theoretical reports or expert opinion pieces that explored therapeutic engagement as a stated aim and were conducted in acute mental health inpatient settings from the patient or nurse perspective were included. Data were extracted from the introduction, results and discussion sections of empirical research, and the complete article of theoretical and expert opinion pieces. Data were coded then grouped into subthemes and themes. Data relating to influencing factors were further categorised according to the Theoretical Domains Framework. Results were synthesised into a conceptual model of engagement.

Results: Five conceptually distinct, but closely related constructs of engagement – called the "Principles of Engagement" – emerged: 1) Understanding the person and their experiences; 2) Facilitating growth; 3) Therapeutic use of self; 4) Choosing the right approach and 5) Authoritative vs. emotional containment. Influences on engagement ranged across all 14 theoretical domains of the Theoretical Domains Framework.

Conclusion: A holistic understanding of the essential components of engagement may make it easier for nurses to recognise what they do, and to do it well. The model can be used to generate testable hypotheses about how and where to target behavioural change interventions. The Principles of Engagement must be reflected in the development of interventions to improve engagement.

What is already known about the topic?

- Although often lacking within acute mental health inpatient environments, it is well known that nurse-patient interactions which are therapeutic in nature improve service user outcomes and staff morale.
- The therapeutic role of mental health nurses is typically conceptualised in terms of dichotomous approaches which undermine therapeutic potential.
- Therapeutic engagement is impeded by conceptual ambiguity and operationalised through individual nurses' experience, choices and education.

What this paper adds

- This is the first study to combine behaviour change theory with empirical evidence to enhance understanding of factors that influence nurse-patient therapeutic engagement and how to

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effectively target interventions to positively influence nurse and patient behaviours.
- Constituents of nurse-patient therapeutic engagement and their influencing factors are integrated into a conceptual model.
- This model offers an accessible framework that can inform how nurses, commissioners and policy makers set standards and evaluate engagement.

1. Background

Nurse-patient therapeutic engagement (hereon referred to as engagement) is of fundamental importance to acute mental health inpatient care (Sweeney et al., 2014). Studies consistently find a positive correlation between engagement and improved outcomes (Farrelly et al., 2014), better perceptions of care (Csipke et al., 2014) and improved satisfaction of care for people who were legally detained (Wykes et al., 2018). Further, nurses who spent more time engaged with patients reported greater job satisfaction (Moreno-Poyato et al., 2018), which may lead to nurses taking fewer sick days (Dodds and Bowles, 2001). This reduces the use of agency nurses who are costly and unfamiliar to patients. Thus it is clear that patients, nurses and their organisations may benefit from improved engagement.

Governmental policy and patient advocacy groups – both in the UK and many other countries – have emphasised the centrality of engagement within acute inpatient settings (Department of Health [DH], 2006). They recommend patients have one-to-one contact with clinicians, alongside access to four hours of therapeutic activities per week (Cresswell et al., 2014; Mental Health Council of Australia). Despite this, research over many decades has failed to demonstrate engagement in practice (Altschul, 1972; Goulter et al., 2015; McAllister and McCrae, 2017), with the most recent review to measure nurse-patient interaction finding just 4–12% of nurses' time was spent on activities that could be considered engagement (Sharac et al., 2010). Qualitative studies describe how on admission patients expect engagement; however, the reality was that this rarely occurred (Stenhouse, 2011; Rose et al., 2015). Mental health charities report both patients and clinicians complain about the quality of inpatient care, with a lack of activities and interaction the primary cause for this (Mind, 2017).

Deficiency of engagement is multifactorial: nurses report their primary reasons as increased administration due to the need to manage ward crises and their perceived lack of ability and skills to deliver activities that are evidence-based (Seed et al., 2010; Ward and Cowman, 2007). Patient reports are similar, citing "petty rules and regulations" as hindering quality engagement (Rose et al., 2015). Despite these challenges, both research and professional nursing bodies broadly describe mental health nursing as a specialised area of practice that uses skilful communication, verbal interchange and interpersonal processes to bring about positive health changes in patients (American Nurses Associate, 1976; Cormack, 1976; Glass, 2017; NHS Employers, 2006).

Clearly the therapeutic use of interacting underpins the nurses' role, and improves both nurses' and patients' experience of care. However, to date there has not been an agreed working definition of engagement in acute inpatient settings, with little specific indication as to how nurses engage as part of their role. This results in nurses assuming an ad hoc approach to engagement, which makes standardisation difficult (Anderson, 1983; Clark, 2012; McAllister and McCrae, 2017) or reverting to more measurable tasks such as ward administration (Rose et al., 2015). Since research shows that the effectiveness of mental health nursing depends on engagement between nurses and patients (Browne and Cashin, 2012; McKeown et al., 2017), there is an urgent need to formulate a holistic understanding of the essential components of engagement. Thus, creating a shared language to guide this complex area of practice and help nurses to articulate what they do, and to enable the development of targeted interventions to improve engagement.

There are some recent examples of interventions that have been implemented to improve engagement (Browne and Hurley, 2017; Dodd et al., 2017; Edwards, 2008; Molin et al., 2018; Moran et al., 2011; Salberg et al., 2018; Thomson and Hamilton, 2012). These, however, have been in the context of either empirical research (Molin et al., 2018; Salberg et al., 2018) – with no follow up, meaning the long-term effects and sustainability are unknown – or in a rehabilitation setting (Browne and Hurley, 2017) which differs from an acute setting due to longer admissions, with less acutely unwell patients who are not compulsorily detained. Two studies report on Protected Engagement Time (PET) (Edwards, 2008; Thomson and Hamilton, 2012), an intervention where nurses devote an hour each day for nurse-patient sessions (Kingös Fund, 2005); however PET does not appear to have had the desired effect (McCrae, 2014). This may be because it emerged from ward practice, rather than being based on theory or evidence-based collaboration with service-users (Nolan et al., 2016). While there is consensus that therapeutic engagement should be prioritised, a practical, theoretically sound solution is yet to be found.

It is now recognised that theoretical understanding is vital in the development and evaluation of complex interventions (Craig et al., 2008), and consideration of behaviour and behaviour change is essential to maximise intervention effectiveness (Davis et al., 2015; Michie et al., 2005). As previously stated, a handful of interventions have been implemented to improve engagement, however there is no evidence that these derived from a sound behavioural change theory. With this in mind, to change behaviour and improve engagement, future interventions must be formulated based on a theoretical understanding of the behaviours needing to be changed (Campbell et al., 2000; Michie et al., 2014). There are numerous theories of behaviour change (e.g. Prochaska and DiClemente, 1983; Ajzen, 1991), many with overlapping, or similar constructs. This creates difficulty in deciphering the most appropriate construct, and many theories contain just a small number of constructs (e.g. Ajzen, 1991 or Becker, 1974) where key determinants of behaviour change may not be represented (Michie et al., 2014).

In response to this, the Theoretical Domains Framework (TDF) was developed to amalgamate and simplify behaviour change theories (Cane et al., 2012; Michie et al., 2005). It consists of 14 domains, derived from 33 theories and 128 constructs, all which fall under the categories of Capability, Opportunity and Motivation (COM-B) (Table 1). The COM-B/TDF theoretical framework can be used to explore and group factors that influence behaviour, and inform intervention design by highlighting potential behavioural targets (Michie et al., 2005). This review aims to conceptualise engagement, and use the COM-B/TDF theoretical framework to explore the factors that influence engagement within acute mental health inpatient settings.

2. Research questions and aims

This review is part of a larger study which uses an Experience-based Co-design (Bate and Robert, 2007) approach to develop, implement and test interventions to improve engagement on acute mental health wards. The review integrates theory and evidence on engagement, in the context of acute mental health wards, to build a framework which will underpin the co-designed interventions to improve engagement in practice. To do this the review will:

1 Explore the constituents of engagement according to the experiences and perspectives of patients and nurses, by answering the following questions:
  i How has nurse-patient therapeutic engagement been defined in the literature?

Table 1
The COM-B model and TDF domains and definitions (Michie et al., 2014).

COM-B component	TDF domains	Definition
Capability	Skills	An ability of or proficiency acquired through practice (skills, skills development, competence, ability, practice, skill assessment)
	Knowledge	An awareness of the existence of something (including knowledge of condition/scientific rationale, procedural knowledge, knowledge of task environment)
	Memory, attention, decision	The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives (memory, attention, attention control, decision making, cognitive overload/tiredness)
	Behavioural regulation	Anything aimed at managing or changing objectively observed or measured actions (self-monitoring, breaking habit, action planning)
Opportunity	Social influences	Those interpersonal processes that can cause individuals to change their thoughts, feeling, or behaviours (social pressure, social norms, group conformity, social comparisons, groups norms, social support, power, intergroup conflict, alienation, group identity, modelling)
	Environment context and resources	Any circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence, and adaptive behaviour (environmental stressors, resources/material resources, organisational culture/climate, salient events/critical incidents, person x environment interaction, barriers and facilitators)
Motivation	Beliefs about capabilities	Acceptance of the truth, reality, or validity about an ability, talent, or facility that a person can put to constructive use (self-confident, perceived competence, self-efficacy, perceived behavioural control, beliefs, self-esteem, empowerment, professional confidence)
	Beliefs about consequences	Acceptance of the truth, reality, or validity about outcomes of a behaviour in a given situation (beliefs, outcome expectancies, characteristics of outcome expectancies, anticipated regret, consequents)
	Social/professional identity	A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting (professional identity, professional role, social identity, identity, professional boundaries, professional confidence, group identify, leadership, organisational commitment)
	Optimism	The confidence that things will happen for the best or that desired goals will be attained (optimism, pessimism, unrealistic optimism, identity)
	Intentions	A conscious decision to perform a behaviour or a resolve to act in a certain way (stability of intentions, stages of change model, trans theoretical model and stages of change)
	Goals	Mental representations of outcomes or end states that an individual wants to achieve (goals (distal/proximal), goal priority, goal/target setting, goals (autonomous/controlled), action planning, implementation intention)
	Reinforcement	Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus (rewards (proximal/distal, valued/not values, probable/improbable), incentives, punishment, consequents, reinforcement, contingencies, sanctions)
	Emotion	A complex reaction pattern, involving experiential, behavioural, and physiological elements, by which the individual attempts to deal with a personally significant matter or event (fear, anxiety, affect, stress, depression, positive and negative affect, burn-out)

ii What factors influence nurse-patient therapeutic engagement, and how do they fit with the COM-B/TDF theoretical framework?

2 Devise a conceptual model of engagement on acute mental health wards

3. Methods

A systematic integrative review of the literature was undertaken, following the method described by Whittemore and Knafl (2005). An integrative review was chosen as it is suitable for building theory, including both empirical and theoretical literature (Hopia et al., 2016), and has direct applicability to clinical practice (Whittemore and Knafl, 2005).

3.1. Eligibility criteria

After conducting a preliminary search, the SPICE Framework (Booth, 2006) was used to develop eligibility criteria. The criteria were modified in an iterative process of reading, refining the criteria and re-reading. The final criteria were as follows: 1) any empirical or theoretical reports or expert opinion pieces; 2) published in a peer-reviewed journal in English; 3) that explore therapeutic engagement as a stated aim; 4) conducted in acute mental health inpatient settings; 5) from the patient or nurse perspective.

3.2. Search strategy

The SPICE Framework (Booth, 2006) was then used to develop the preliminary search strategy. This search strategy was tested and modified to achieve balance between sensitivity and specificity (Higgins and Green, 2011). The final search was conducted in January 2018 and included an English language limiter. As recommended by previous research (McCrae et al., 2015) no date limiter was applied as the authors felt it arbitrary due to little evidence in the international literature of a shift in practice relating to nurse-patient engagement. The search was initially created for CINAHL, then adapted for PsycINFO, BNI and Cochrane library (see Supplementary 1 for detailed overview of the search strategy). Reference lists of all included papers and relevant review articles e.g. Cleary et al., 2012; McAndrew et al., 2014 and Sharac et al., 2010 were hand searched.

3.3. Screening and selection process

All articles retrieved from the databases were exported into the reference management software package EndNote (version X7). Once duplicates were removed articles were selected based on a two-level screening process:

1) 1) SM screened all titles and abstracts and classified articles as "include", "exclude" or "unclear". Given the number of titles retrieved by the search, SM, NM and GR triple screened a random sample of 10% to classify articles in the same way and to structure and enable further discussion about article eligibility between the review team. Articles where consensus was not reached between two or more reviewers were independently assessed by SM and NM. Differences were discussed between SM and NM until consensus was reached.
2) SM and NM double screened all full text articles. A consensus meeting was held to discuss any articles classified as

"unclear" or "include" and to agree upon the final set of articles to include. The number of and reason for exclusions were documented in each round.

3.4. Critical appraisal

SM independently appraised the studies, and discussed the assessments with NM, GR and VT. Qualitative studies were assessed using the Critical Appraisal Skills Programme (CASP) checklists for qualitative research (Critical Appraisal Skills Programme (CASP, 2014), the quantitative studies were assessed using the STROBE checklist for cohort, case-control and cross-sectional studies (von Elm et al., 2008) and the mixed-methods studies were appraised using the Mixed-Methods Appraisal Tool (Pluye et al., 2011). Integrative reviews consider a wide range of evidence, including empirical research, theoretical papers and expert opinion (Whittemore and Knalf, 2005). Many of these documents are central to the evolving field of nurse-patient engagement but are not suitable for appraisal with traditional grading tools. Articles were not, therefore, excluded based on their quality. Rather consideration of their place in the evidence hierarchy was taken into account during data analysis, and an overall summary of the quality of empirical evidence, presented in Section 4.2 of this paper, should be considered alongside the findings of this review.

3.5. Data extraction and analysis

SM independently extracted and analysed the studies, and discussed results with NM, GR and VT. A data extraction form was developed based on study characteristics (e.g. author, year, country, aims, methods, setting, sample). An initial coding framework was devised from the aims of the review questions (e.g. constituents/concepts of engagement, good/bad engagement, influencing factors). Data were extracted from the introduction, results and discussion sections of empirical research, and the complete article of theoretical and expert opinion pieces and managed in the qualitative data analysis software package NVivo11 (QSR International, Cambridge, MA, USA). The coding framework was further developed and codes were then grouped into subthemes and themes and checked against the aims of the review and the content of the dataset (see Tables 2 and 3 in results). Data derived from the influencing factors section of the data

Table 2
Therapeutic engagement on acute mental health wards.

Principle of engagement	Type of engagement (Techniques)	Relevant research/evidence
Principle 1: Understanding the person and their experiences	Person-centred care	Anderson, 1983; Awty et al., 2010; Cleary and Edwards, 1999; Cleary et al., 1999; Delaney et al., 2017; Hem and Heggen, 2003; Koivisto et al., 2004; Talseth et al., 1999
	Identifying feelings and needs	Bowers et al., 2010; Chiovitti, 2008; Delaney et al., 2017; Forchuk and Reynolds, 2001; Hem and Heggen, 2003; Keltner, 1985; Koivisto et al., 2004; Latvala and Janhonen, 1998; Morrison et al., 1996; Pepalu, 1992
	Deciphering patterns	Bowers et al., 2010; Bray, 1999; Delaney et al., 2017; Hargreaves, 1969; Pepalu, 1992
	Exploration	Anderson, 1983; Andes and Shattell, 2006; Awty et al., 2010; Björkdahl et al., 2010; Bowers et al., 2010; Bowles et al., 2002; Bray, 1999; Cameron et al., 2005; Chiovitti, 2008; Morrison et al., 1996; Pepalu, 1992; Sebergsen et al., 2016
	Listening	Anderson, 1983; Berg and Hallberg, 2000; Björkdahl et al., 2010; Bowers et al., 2010; Bray, 1999; Delaney et al., 2017; Forchuk and Reynolds, 2001; Keltner, 1985; Latvala and Janhonen, 1998; Pepalu, 1992; Talseth et al., 1999
Principle 2: Facilitating growth	Collaborative care	Awty et al., 2010; Berg and Hallberg, 2000; Bowers et al., 2010; Chiovitti, 2008; Delaney et al., 2017; Forchuk and Reynolds, 2001; Hem and Heggen, 2003; Latvala and Janhonen, 1998; McAllister et al., 2004; Morrison et al., 1996; Pepalu, 1992; Sebergsen et al., 2016
	Respecting the patient's decisions	Anderson, 1983; Awty et al., 2010; Hem and Heggen, 2003
	Giving feedback	Bowers et al., 2010; Chiovitti, 2008; Delaney et al., 2017; Hem and Heggen, 2003; Koivisto et al., 2004; Mackay et al., 2005; Morrison et al., 1996; Pepalu, 1992; Roche et al., 2011; Talseth et al., 1999
	Role-modelling	Chiovitti, 2008; Latvala and Janhonen, 1998; McAllister et al., 2004; Pepalu, 1992
	Protecting	Berg and Hallberg, 2000; Koivisto et al., 2004; Talseth et al., 1999
	General reassurance	Bee et al., 2006; Berg and Hallberg, 2000; Björkdahl et al., 2010; Chiovitti, 2008; Cleary and Edwards, 1999; Cleary et al., 1999; Keltner, 1985; Latvala and Janhonen, 1998; Talseth et al., 1999
Principle 3: Therapeutic use of self	Being there	Awty et al., 2010; Berg and Hallberg, 2000; Björkdahl et al., 2010; Bowers et al., 2010; Bowles et al., 2002; Bray, 1999; Cleary and Edwards, 1999; Cleary et al., 1999; Gijbels, 1995; Koivisto et al., 2004; Mackay et al., 2005; McAllister et al., 2004; McAllister and McCrae, 2017; Pepalu, 1992; Pereira and Woollaston, 2007; Sebergsen et al., 2016; Talseth et al., 1999
	Conversing as people	Bray, 1999; Cleary and Edwards, 1999; Cleary et al., 1999; Delaney et al., 2017; Hem and Heggen, 2003; Keltner, 1985; McAllister et al., 2004; Pepalu, 1992; Whittington and McLaughlin, 2000
	Interpersonal communication	Forchuk and Reynolds, 2001; Keltner, 1985
Principle 4: Choosing the right approach	Adapting roles	Berg and Hallberg, 2000; Björkdahl et al., 2010; Cleary and Edwards, 1999; Cleary et al., 1999; Delaney et al., 2017; Forchuk and Reynolds, 2001; Latvala and Janhonen, 1998; McAllister et al., 2004; McAllister and McCrae, 2017; Morrison et al., 1996; Sebergsen et al., 2016; Talseth et al., 1999
	Structured or informal	Bee et al., 2006; Gurel, 1963; Hargreaves, 1969; Keltner, 1985; Koivisto et al., 2004; Latvala and Janhonen, 1998; Whittington and McLaughlin, 2000
	Being with vs. doing for	Berg and Hallberg, 2000; Delaney et al., 2017; Koivisto et al., 2004; Latvala and Janhonen, 1998
Principle 5: Authoritative vs. emotional containment	Containment by control, coercion or force	Berg and Hallberg, 2000; Björkdahl et al., 2010; Bowers et al., 2010; Mackay et al., 2005
	Emotional containment	Bowers et al., 2010; Bowles et al., 2002; Cameron et al., 2005; Cleary and Edwards, 1999; Cleary et al., 1999;

Table 3
Influential factors identified from the literature mapped to COM-B and the Theoretical Domains Framework (Michie et al., 2005).

Principle categories	Overarching factors	COM-B	TDF domains
Organisational climate and culture	Ward philosophy	Opportunity	Social influences
		Motivation	Social and professional identity
			Beliefs about consequences
			Intention
			Emotion
	Ward milieu	Capability	Memory, attention, decision process
		Opportunity	Environmental context and resources
		Motivation	Beliefs about consequences
	Patient turnover	Opportunity	Environmental context and resources
	Role support	Capability	Memory, attention, decision process
		Opportunity	Social influences
			Environmental context and resources
		Motivation	Emotion
	Resources	Opportunity	Environmental context and resources
	Workload	Capability	Memory, attention, decision process
		Opportunity	Environmental context and resources
		Motivation	Beliefs about consequences
			Reinforcement
Overlapping nurse and patient personal resources	Empathy and connectedness	Motivation	Emotion
	Experiences and attitudes	Opportunity	Social influences
		Motivation	Beliefs about capabilities
			Optimism
			Emotion
	Emotional toll	Capability	Knowledge
		Motivation	Behavioural regulation
			Beliefs about capabilities
			Emotion
	Trust	Opportunity	Social influences
		Motivation	Emotion
	Regular contact	Capability	Behavioural regulation
		Opportunity	Environmental context and resources
		Motivation	Reinforcement
Nurses' personal resources	Self-awareness	Capability	Knowledge
		Motivation	Emotion
	Role competency	Capability	Skills
			Knowledge
		Opportunity	Environmental context and resources
		Motivation	Beliefs about capabilities
			Emotion
	Outcomes of engagement	Motivation	Beliefs about capabilities
			Optimism
			Goals
	Staff characteristics	Opportunity	Environmental context and resources
		Motivation	Beliefs about capabilities
Patients' personal resources	Language	Capability	Skills
			Knowledge
			Memory, attention, decision process
		Opportunity	Environmental context and resources
	Acuity of illness	Capability	Skills
			Memory, attention, decision process
		Opportunity	Environmental context and resources
		Motivation	Beliefs about capabilities
			Optimism
	Shared ownership	Capability	Skills
			Social influences
		Opportunity	Environmental context and resources
Safety and infrastructure	Ward layout	Opportunity	Environmental context and resources
	Physical safety	Capability	Memory, attention, decision process
		Opportunity	Environmental context and resources,
			Social influences
		Motivation	Beliefs about consequences
			Emotio

extraction form was further categorised according to the COM-B/TDF theoretical framework (Michie et al., 2014) to inform the development of interventions to improve engagement in practice. Data tables and visual maps were created to display the coded data so similarities and differences could be identified (Miles and Huberman, 2014). The results were synthesised into a conceptual model of engagement that comprehensively portrayed the findings.

4. Findings

4.1. Summary of search results

Fig. 1 presents the PRISMA flow diagram of the systematic search. Of the 3410 titles identified, 205 full texts were screened against the eligibility criteria. In total, 37 papers met the eligibility criteria and were included in the analysis

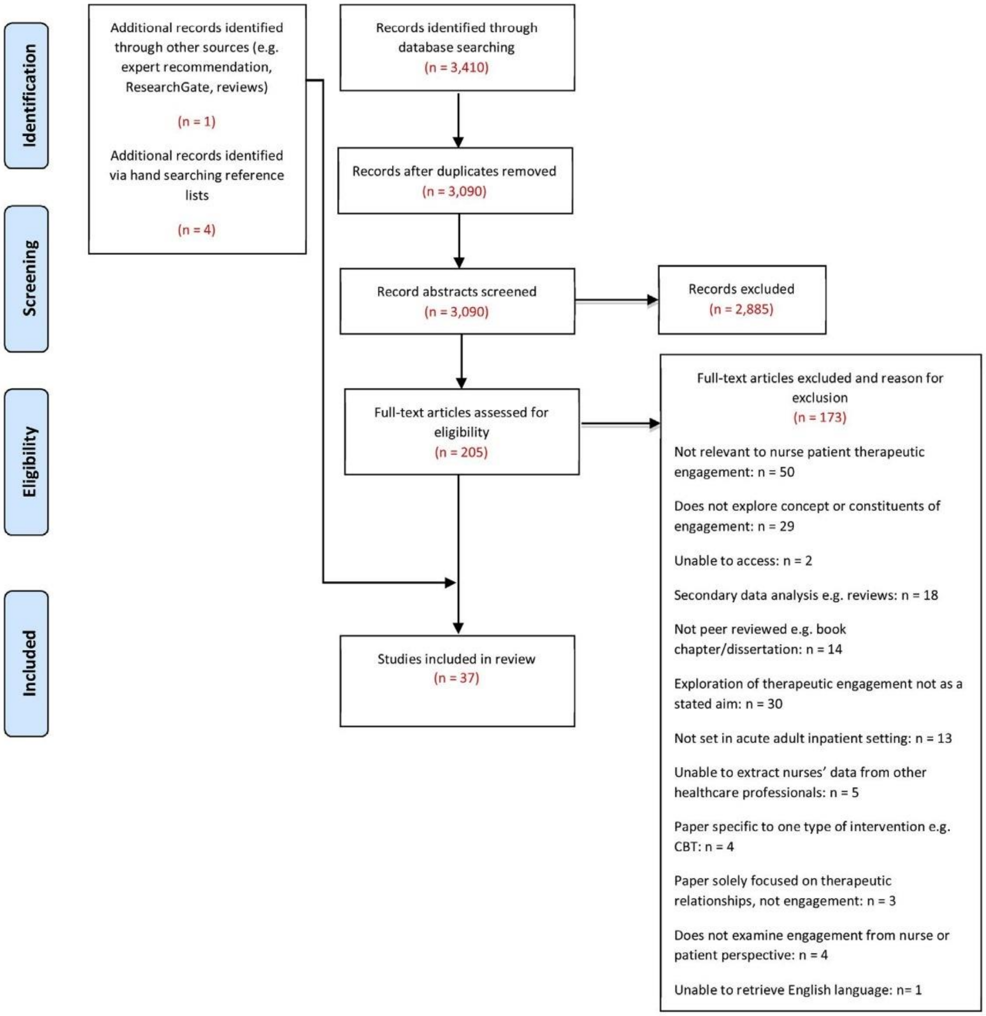

Fig. 1. PRISMA flow diagram of search results.

(Cleary et al., 1999 and Cleary and Edwards, 1999 reported results of the same study and were analysed as one). The 37 papers were published between 1963 and 2017 and referred to research undertaken in the UK (*n* = 13), the USA (*n* = 8), Australia (*n* = 5), Norway (*n* = 3), Finland (*n* = 2), Sweden (*n* = 2), Canada (*n* = 1), UK and Canada combined (*n* = 1) and country unknown (*n* = 2). Nineteen papers were qualitative, five quantitative and three mixed-methods. There was also one theoretical paper, one case study and ten expert opinion pieces. See Supplementary Table 2 for details of the characteristics of the included literature.

4.2. Quality appraisal

Overall, a majority of studies sampled only nurses (total of 386 nurse participants). Just eight studies included patients within their sample (total of 121 patient participants), suggesting that the patient voice requires greater representation within the engagement literature. The qualitative studies (*n* = 19) and qualitative sections of the mixed-methods studies (*n* = 3) were of varied quality. The major methodological limitation was the lack of researcher reflexivity (*n* = 16), specifically the effect of researchers' preconceptions on study design, data collection and data analysis. Only two studies (Awty et al., 2010; Björkdahl et al., 2010) considered their ontological and epistemological stance, and just four (Latvala and Janhonen, 1998; McAllister and McCrae, 2017; Morrison et al., 1996; Sebergsen et al., 2016) connected their findings to a theoretical framework. Thus, it remained unclear to what extent most papers' findings were affected by pre-existing preconceptions of engagement, or what "lens" the phenomenon was examined through. Sample sizes were generally large for qualitative research, ranging from six to 45 participants, improving the transferability of results. The quantitative studies (*n* = 3) and quantitative sections of the mixed-methods studies (*n* = 3) comprised designs that were cross-sectional, observational and survey, often based on self-report, or observations by a single researcher. These designs may have introduced bias and were considered low-grade evidence. Quantitative data collection instruments could have been improved with measures of validity and reliability (*n* = 3).

4.3. Analysis

4.3.1. Question 1.1 – how has nurse-patient therapeutic engagement been defined in the literature?

The language used to describe engagement was non-specific, and varied throughout the papers, for example "caring" (Björkdahl et al., 2010; Chiovitti, 2008; Talseth et al., 1999), "connectedness" (Heifner, 1993), "interaction" (Cleary and Edwards, 1999; Cleary et al., 1999; Hargreaves, 1969; Morrison et al., 1996), "being with" (Bowles et al., 2002), "helping methods" (Latvala and Janhonen, 1998), "encounters" (McAllister et al., 2004), and "working relationships" (Berg and Hallberg, 2000), with just three papers referring to engagement specifically as "therapeutic engagement" (Delaney et al., 2017; McAllister and McCrae, 2017; Pereira and Woollaston, 2007). There was no consensually agreed construct of engagement, which may be because only three papers based their understanding of engagement on a sound theory (McAllister and McCrae, 2017; Morrison et al., 1996; Sebergsen et al., 2016), and even those papers did not use the same theory. The only paper to use a theory directly related to nurse-patient engagement was Morrison and colleagues who used Peplauös (1952) theory of interpersonal relations to operationalise Peplau's work roles in the psychiatric setting.

Due to the lack of a sound theoretical underpinning, and use of non-specific terminology, what it meant to engage therapeutically was poorly articulated in the literature. Despite this, through coding and iterative comparison five conceptually distinct, but closely related constructs of engagement emerged: 1) Understanding the person and their experiences; 2) Facilitating growth; 3) Therapeutic use of self; 4) Choosing the right approach and 5) Authoritative vs. emotional containment. These constructs will be referred to as the "Principles of Engagement". Table 2 summarises these principles and the following section describes each principle as per the evidence that supports it.

Principle 1: understanding the person and their experiences

Understanding the person and their experiences refers to practices such as "person-centred care", "identifying feelings and needs", "deciphering patterns", "exploration" and "listening". This construct describes how the nurse, in conjunction with the patient, must decipher the function and meaning of the patient's lived experience of illness. This required the combination of both technical and soft skills to build a holistic picture of the pathophysiological and psychosocial elements of a patient and their illness. It was important that nurses did not dismiss the patient's own reality on account of them being acutely unwell – but rather acknowledged and validated patients' symptoms (Bowers et al., 2010; Chiovitti, 2008; Delaney et al., 2017; Keltner, 1985; Latvala and Janhonen, 1998).

Practically nurses achieved this by deciphering patterns in patients' thoughts, feelings or actions, for example, piecing together fragments of information that had similar or distinctive features (Bowers et al., 2010; Bray, 1999; Delaney et al., 2017; Hargreaves, 1969; Pepalu, 1992), naming common themes that occurred in distorted speech, and feeding this information back to patients to clarify meaning and build a picture of the patient as a person (Bowles et al., 2002; Koivisto et al., 2004; Morrison et al., 1996). This required nurses to employ both active and passive listening skills, for example nurses gave patients time and space to express their feelings in a non-directive manner which ensured the patient's voice was heard (Anderson, 1983; Berg and Hallberg, 2000; Björkdahl et al., 2010; Bowers et al., 2010; Bray, 1999; Delaney et al., 2017; Forchuk and Reynolds, 2001; Latvala and Janhonen, 1998). Nurses clarified their understanding of the observed problems, concerns, behaviours and reactions which developed an understanding of the patient that was centred in the patient's own reality (Andes and Shattell, 2006; Awty et al., 2010; Bowles, 2000; Bowles et al., 2002; Cameron et al., 2005; Chiovitti, 2008; Morrison et al., 1996; Pepalu, 1992). This understanding set the scene for Principle 2.

Principle 2: facilitating growth

Facilitating growth refers to practices such as "collaborative care", "giving feedback", "role-modelling", "protecting", and "general reassurance". This construct describes empowering acts that enable patients to learn and test new skills to manage their illness, symptoms and behaviours, and gain independence in preparation for discharge back into the community. To do this, nurses took their understanding of the patient - gained through employing the techniques discussed in Principle 1 - further by developing a working relationship where they co-created a shared understanding of the patient's experiences, illness and behaviours. Nurses used this shared understanding to provide appropriate biopsychosocial support, apply and test remedial measures to improve patients' wellbeing and empower patients to use this understanding to make their own decisions about the best strategies to manage their illness. Nurses performed a facilitative role, where it was recognised that the patient ultimately knew the path to becoming well again. Nurses respected patients' decisions and allowed them to set the pace of things, which resulted in personal growth and a new understanding of self (Anderson, 1983; Awty et al., 2010; Bowers et al., 2010; Chiovitti, 2008; Delaney et al., 2017; Forchuk and Reynolds, 2001; Hem and Heggen, 2003; Latvala and Janhonen, 1998; Mackay et al., 2005; McAllister et al., 2004; Morrison et al., 1996; Pepalu, 1992; Sebergsen et al., 2016).

To practically facilitate an understanding of self, nurses were open, honest and empathetic when feeding back what they noticed about patients, for example what the patient was physically doing, the content of their speech, and subtleties such as body language (Bowers et al., 2010; Chiovitti, 2008; Delaney et al., 2017; Hem and Heggen, 2003; Keltner, 1985; Koivisto et al., 2004; Morrison et al., 1996; Pepalu, 1992; Roche et al., 2011; Talseth et al., 1999). As well as facilitating understanding, to catalyse behavioural change, nurses also modelled behaviours and actions they wanted to see in patients. For example keeping calm during heated interactions or being open in conversation to encourage openness in the patient (Chiovitti, 2008; Latvala and Janhonen, 1998; McAllister et al., 2004; Pepalu, 1992).

For patients to achieve personal growth, they needed confidence to test new ways of being. To facilitate this, nurses created a safe environment, by making the patient feel protected and reassured. Protecting was described by such acts as being present, taking the initiative to talk to the patient, using relaxed body language, calm voices, good eye contact and engaging in caring acts such as making a patient a cup of tea (Berg and Hallberg, 2000; Koivisto et al., 2004; Talseth et al., 1999). General reassurance was conveyed by giving time, physical contact and responding to patients' concerns in a timely manner (Bee et al., 2006; Björkdahl et al., 2010; Chiovitti, 2008; Cleary and Edwards, 1999; Cleary et al., 1999; Keltner, 1985; Latvala and Janhonen, 1998).

Principle 3: therapeutic use of self

The therapeutic use of self refers to terms and practices such as "being there", "conversing as people", and "interpersonal communication". This construct describes the nurse's conscious use of his or her own personal characteristics as a tool to facilitate optimal experiences and outcomes for the patient. This is opposed to relying on technical tasks or routines (Berg and Hallberg, 2000; Björkdahl et al., 2010; Hem and Heggen, 2003; Koivisto et al., 2004).

The ambiguous practice of being there was commonly referred to within the literature. More specifically it was described as "peaceful communication" (Sebergsen et al., 2016), or "silent co-existing" (Björkdahl et al., 2010) where few words needed to be said. For example "sitting quietly with a cup of tea" (McAllister et al., 2004), or "sitting with a patient when they cry" (Talseth et al., 1999), "being with, rather than looking on" (Pereira and Woollaston, 2007) by "being present on the floor" (McAllister and McCrae, 2017). Though words may be used, the literature suggests communication also occurred non-verbally through gestures, an activity, or simply an intensified presence that did not allow the patient to disappear (Berg and Hallberg, 2000; Björkdahl et al., 2010; Bowers et al., 2010; Mackay et al., 2005; McAllister et al., 2004; McAllister and McCrae, 2017; Sebergsen et al., 2016). This unique practice facilitated the first two principles of engagement by giving patients the space to feel safe, let go, be themselves, and talk in their own time, without the pressure of expecting a conversation.

To use oneself as a therapeutic tool, it was necessary for nurses to combine two contradictory roles: that of health professional, with that of fellow human being (Cleary and Edwards, 1999; Cleary et al., 1999; Delaney et al., 2017; Hem and Heggen, 2003; McAllister et al., 2004; Pepalu, 1992). Nurses combined professional skills such as being perceptive to subtle body language and non-verbal cues and validating these, alongside human skills such as self-awareness. Practically this required nurses to know and monitor their own vulnerabilities and emotions, whilst also being open with the patient about these vulnerabilities (Hem and Heggen, 2003; McAllister et al., 2004). This links with the engagement technique of role-modelling as when nurses allowed patients to see their vulnerabilities, this helped them recognise their similarities with others, rather than their differences. However, showing vulnerabilities often took an emotional toll on nurses and could be counterproductive. Nurses who were expert in these techniques were able to give enough of themselves to be useful to patients, but maintain a suitable level of distance so as not to burden themselves emotionally and retreat from engagement completely.

Principle 4: choosing the right approach

Choosing the right approach refers to terms and practices such as "adapting roles" and "structured vs. informal interactions". This construct describes how nurses skilfully adapt their approach and use a variety of engagement techniques, depending on the needs and behaviours of the individual patient (Bee et al., 2006; Delaney et al., 2017; Gurel, 1963; Hargreaves, 1969; Keltner, 1985; Koivisto et al., 2004; McAllister et al., 2004; Talseth et al., 1999; Whittington and McLaughlin, 2000). Seven distinct, but interrelated role types emerged from the literature: 1) Stranger (Morrison et al., 1996; Forchuk and Reynolds, 2001); 2) Sensitive (Berg and Hallberg, 2000; Björkdahl et al., 2010; Forchuk and Reynolds, 2001; McAllister and McCrae, 2017; Morrison et al., 1996; Sebergsen et al., 2016); 3) Collaborator (Berg and Hallberg, 2000; Latvala and Janhonen, 1998; McAllister and McCrae, 2017; Morrison et al., 1996); 4) Committed (McAllister and McCrae, 2017; Morrison et al., 1996); 5) Instrumental (Berg and Hallberg, 2000; McAllister and McCrae, 2017; Morrison et al., 1996); 6) Dominant (Berg and Hallberg, 2000; Latvala and Janhonen, 1998; Morrison et al., 1996) and 7) Container (Berg and Hallberg, 2000; Björkdahl et al., 2010; Cleary and Edwards, 1999; Cleary et al., 1999; Mackay et al., 2005). Supplementary Table 3 shows each role type and its corresponding engagement techniques.

Nurses performed different roles throughout the progression of the therapeutic relationship, for example a "stranger" or "sensitive" role may be performed early on in the relationship. Conversely, once trust and familiarity were built, a "collaborative" role may be performed (Delaney et al., 2017; Forchuk and Reynolds, 2001; Morrison et al., 1996). Nurses performed more than one role at a time, for example nurses showed sensitivity whilst also containing patients' emotions or behaviours, and expertly switched between roles based on cues from the patient (Delaney et al., 2017).

Nurses interacted in two main ways: either through planned, formal sessions, or informal, *ad hoc* interactions. There was contention in the literature as to the therapeutic merit of each. Some studies argued that therapeutic engagement was any period of time that structured or formal therapy was given to patients (Bee et al., 2006; Hargreaves, 1969; Whittington and McLaughlin, 2000). Conversely, other studies suggest that any nurse-patient interaction could be therapeutic, but also had the potential to be non-therapeutic if conducted in the wrong manner (Koivisto et al., 2004; McAllister and McCrae, 2017). Despite this inconsistency, it was generally agreed that formal engagement could be positively or negatively influenced by the informal interactions between nurse and patient (McAllister and McCrae, 2017; Whittington and McLaughlin, 2000).

One of the few studies that examined engagement from the patients' perspective (McAllister and McCrae, 2017), found that patients often preferred shorter, informal interactions that were regularly available, which is important as other studies found that nurses were deterred from engaging with patients as they feared all interactions had to be specifically formulated conversations (Gurel, 1963). When considered alongside the fact that both patients and nurses said engagement was lacking on acute mental health wards (McAllister and McCrae, 2017), it is reasonable to suggest that nurses should prioritise skilfully conducted, informal engagements that use the techniques laid out in the Principles of Engagement.

Principle 5: authoritative vs. emotional containment

Principle five refers to both containing patients' emotions and containing patients by control, coercion or force (Berg and Hallberg, 2000; Björkdahl et al., 2010; Bowers et al., 2010; Bowles et al., 2002; Cameron et al., 2005; Cleary and Edwards, 1999; Cleary et al., 1999; Mackay et al., 2005). As containment was embedded in the context of an acute ward, inevitably, nurses had to be directive and coercive in some instances (Mackay et al., 2005). Patients discussed the practice of setting limits on behaviour as a necessary part of the nurse's role (Cleary and Edwards, 1999; Cleary et al., 1999). Nurses recognised that patients who were acutely unwell could be very demanding, therefore placed limits up front on how long they could engage (Bowers et al., 2010). However only one study (Björkdahl et al., 2010) found containment by control, coercion or force to be a therapeutic act. This may be because it was conducted on a psychiatric intensive care unit, where the most violent and aggressive individuals are cared for, hence control, coercion and force were necessary to maintain the physical safety of some individuals.

The rest of the literature spoke of containment by control as a last resort, and on the whole, it was considered non-therapeutic. Emotional containment was an alternative form of containment evident in some studies (Berg and Hallberg, 2000; Björkdahl et al., 2010; Bowers et al., 2010; Bowles et al., 2002; Cameron et al., 2005; Cleary and Edwards, 1999; Cleary et al., 1999). This was considered a wholly therapeutic act where nurses contained either their own emotions to facilitate good engagement, (Bowers et al., 2010; Bowles et al., 2002), or helped patients to contain their own distressing emotions (Berg and Hallberg, 2000; Bowers et al., 2010; Bowles et al., 2002; Cameron et al., 2005). Effective emotional containment required nurses to perform the techniques described in Principle 2 of Engagement, and deliberate, reflect and allow patients space and time to think and talk about their experiences rather than hastily react to patients' symptoms through containment methods such as seclusion or special observations (Bowers et al., 2010; Bowles et al., 2002; Cameron et al., 2005). It was thought that if emotional containment was the dominant ward philosophy, therapeutic engagement would flourish (Bowers et al., 2010; Bowles et al., 2002).

4.3.2. Question 1.2 – what factors influence nurse-patient therapeutic engagement?

The Principles of Engagement synthesise what nurses, and to a lesser extent, patients, said was ideal engagement practice. In reality, however, there were many factors that facilitated or impeded ideal practice. The following findings use the COM-B/TDF theoretical framework to organise influential factors into theoretical behavioural domains that can be targeted by an intervention. Twenty overarching influential factors emerged from the literature. These were grouped into four principal categories: 1) organisational climate and culture; 2) nurses' personal resources; 3) patients' personal resources and 4) safety and infrastructure. Influences on engagement ranged across all 14 theoretical domains of the COM-B/TDF framework (Table 3; more detailed summary, with illustrative quotes from the literature available in Supplementary Table 4). Domains which were present in all principle categories were social influences and social and professional identity (often grouped together), environmental context and resources and emotion. Though domains are discussed here separately, they were not mutually exclusive and often overlapped.

Social influences and social and professional identity

Ward culture, that encompassed a shared vision or philosophy that formalised engagement, positively influenced engagement (Awty et al., 2010; Cameron et al., 2005; Cleary and Edwards, 1999; Cleary et al., 1999; Delaney et al., 2017; Gurel, 1963; Hem and Heggen, 2003; McAllister et al., 2004; Miller, 1964; Whittington and McLaughlin, 2000). Despite this, most papers described ward philosophies based on medical, control and risk models, with little evidence of a united approach to patient care (Awty et al., 2010; Bee et al., 2006; Bowles, 2000; Bowles et al., 2002; Bray, 1999; Cleary and Edwards, 1999; Cleary et al., 1999; Delaney et al., 2017; Forchuk and Reynolds, 2001; Pereira and Woollaston, 2007).

Nurses' experience and attitude towards engagement strongly influenced whether they did or did not engage. Nurses spoke of the need to feel valued by patients and were encouraged when they created meaningful, person-centred relationships that facilitated positive change (Andes and Shattell, 2006; Awty et al., 2010; Gurel, 1963; Heifner, 1993). Conversely, if they failed to see positive changes in patients, nurses were more likely to possess impoverished views of their self-efficacy (Andes and Shattell, 2006). This led to fewer nurse-patient interactions, which was problematic as regular patient contact encouraged future interactions (Bowers et al., 2010; Koivisto et al., 2004; McAllister and McCrae, 2017).

Environmental context and resources

Nurses wanted support from their organisations to promote and foster their therapeutic abilities, however a lack of resources, for example staff and bed shortages, bureaucracy (Awty et al., 2010; Gijbels, 1995; McCrae, 2014), and high patient turnover meant some nurses struggled to develop meaningful relations with patients, instead gravitating towards tasks promoted by the organisation such as paperwork (Berg and Hallberg, 2000; Hargreaves, 1969; McAllister and McCrae, 2017).

The physical layout of wards was often thought to hinder engagement. Nursing stations with locked doors and Plexiglas walls meant patients had to breach a physical barrier to engage with nurses. This created an "us versus them" environment. The size of many wards meant that patients could easily go unnoticed, and nurses used valuable time just locating patients, rather than engaging with them (Andes and Shattell, 2006; Cleary and Edwards, 1999; Cleary et al., 1999; Gijbels, 1995; McAllister et al., 2004; McAllister and McCrae, 2017).

Emotion

Empathising and feeling connected to patients was a strong determinant of engagement (Awty et al., 2010; Björkdahl et al., 2010; Bowers et al., 2010; Bowles et al., 2002; Bray, 1999; Chiovitti, 2008; Delaney et al., 2017; Forchuk and Reynolds, 2001; Heifner, 1993; Hem and Heggen, 2003; Keltner, 1985; Latvala and Janhonen, 1998; McAllister et al., 2004; McAllister and McCrae, 2017; Morrison et al., 1996; Pepalu, 1992; Pereira and Woollaston, 2007; Talseth et al., 1999). This was achieved when nurses disclosed personal experiences and bonded over commonalities with patients. However the system did not encourage this behaviour, instead favouring a more distant approach which left nurses feeling constrained by text-book ways of interacting (Berg and Hallberg, 2000; Delaney et al., 2017; Hem and Heggen, 2003). Some nurses felt emotionally burdened by empathetic feelings, which led them to retreat to the psychological safety of office administration in defence against the emotional toll (Björkdahl et al., 2010; Gurel, 1963; Hem and Heggen, 2003; McAllister and McCrae, 2017; Miller, 1964). Awareness of their own vulnerabilities, coupled with the ability to know when to disengage helped nurses overcome this (Chiovitti, 2008; Delaney et al., 2017; Koivisto et al., 2004; McAllister et al., 2004; Sebergsen et al., 2016).

The potential for physical violence towards nurses was considered high, therefore nurses would disengage, or focus their work on assessing risk rather than engagement. Patients also felt unsafe on the wards. Some opted to stay in their rooms due to fear of attack from other more unwell patients. This caused them to become invisible to nurses, so important opportunities for engagement were missed (Björkdahl et al., 2010; Bowles, 2000; Bray, 1999).

Other domains

Skills, knowledge and beliefs about capabilities emerged as further key influences on engagement. Some studies found that nurses possessed engagement skills (Awty et al., 2010; Mackay et al., 2005; Pereira and Woollaston, 2007; Whittington and McLaughlin, 2000), however sometimes lacked the confidence to engage (Anderson, 1983; Cleary and Edwards, 1999; Cleary et al., 1999). Conversely, other studies reported nurses with inadequate engagement skills, thus diminishing the quality of nurse-patient interactions (Bray, 1999; McCrae, 2014; Roche et al., 2011). Importantly, nurses needed guidance and organisational support to facilitate engagement (McCrae, 2014), but felt this was not provided, despite being skilled to engage (Awty et al., 2010; McAllister and McCrae, 2017).

5. Discussion

The aim of this integrative review was to conceptualise engagement, and use the COM-B/TDF theoretical framework to explore the factors that influence engagement within acute mental health inpatient settings. The review identified five principles of engagement that apply to nurse-patient therapeutic engagement in acute inpatient settings. Engagement is conceptualised as a multi-dimensional construct, where many influential factors work together to enhance or impede it. A tentative conceptual model of engagement was produced (Fig. 2). The model depicts how the five principles, i.e. the active phase of engagement, work within an integrated triad of listening, understanding and responding. However, both the organisational climate and culture and safety and physical infrastructure of a ward, alongside nurses' and patients' own personal resources may either positively or negatively influence engagement. Additionally, an individual's actual or perceived capabilities, opportunities and motivation drive their ability to overcome the influential factors, and once engagement is initiated, continue to drive ongoing engagement.

Nursing scholars have long argued that as a profession, mental health nursing has focused too long on trying to explain

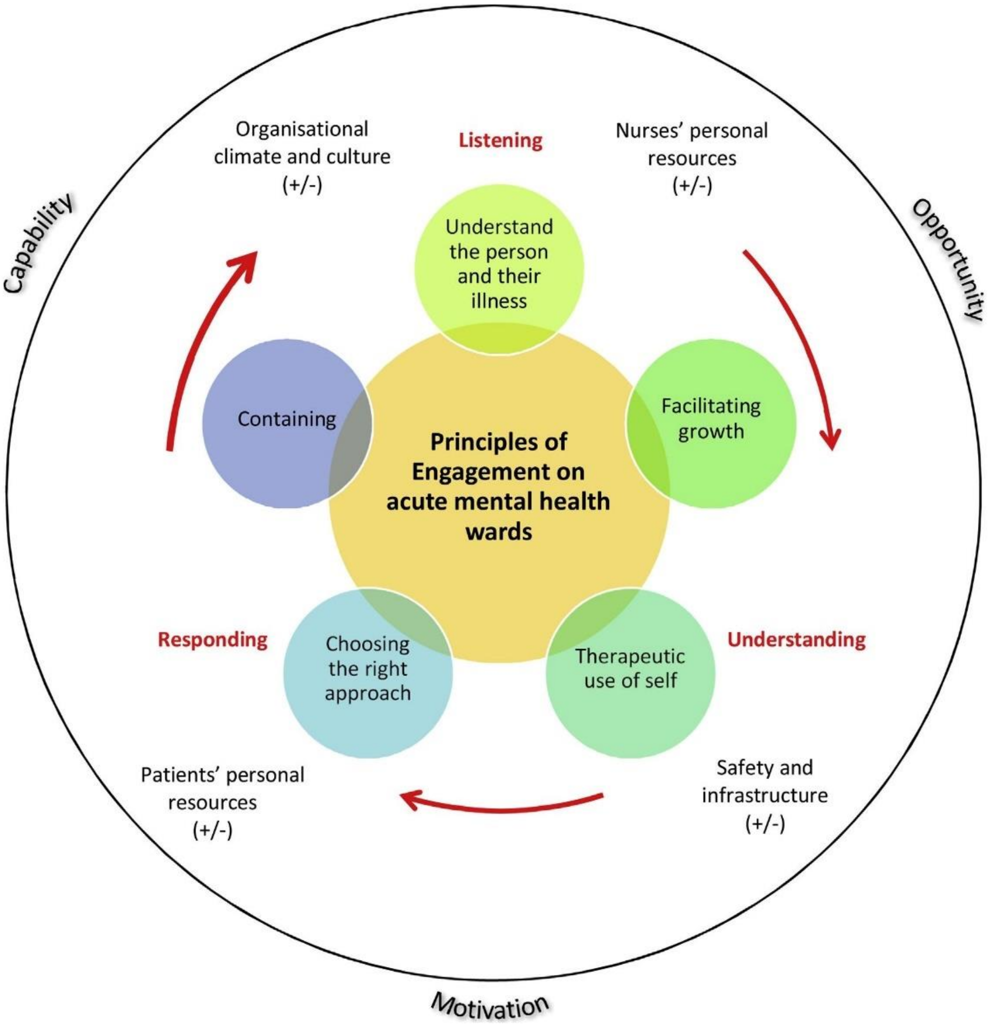

Fig. 2. Tentative conceptual model of nurse-patient therapeutic engagement on acute inpatient wards.

engagement "in" the therapeutic relationship, when focus should be placed on what happens once engagement takes place (Browne and Cashin, 2012; Happell, 2011). While the model and accompanying description of the Principles of Engagement are consistent with existing definitions of engagement (Cormack, 1976; Thomson and Hamilton, 2012), they expand on current knowledge by providing the necessary specificity to guide nurses in practice, and go some way in creating a shared language that articulates what happens when active engagement does occur. Thus the model can be used to inform the provision of quality engagement on acute mental health wards, and may help nurses gain recognition for their unique contribution to practice, by equipping them with language to identify the therapeutic work they do.

The importance of engagement has long been recognised (Sharac et al., 2010), with a recent push towards improving patient experience and the quality of care (Ross and Naylor, 2017). Despite this, people admitted to acute wards still receive suboptimal care compared to other patient groups (Mental Health Task Force, 2016; Wykes et al., 2018). Patients continuously report acute wards as frightening and non-therapeutic places, where poor quality engagement has negatively impacted their mental health (McAllister and McCrae, 2017; Mind, 2004,2011; Schizophrenia Commission, 2012). The literature shows similarities in the significance that both nurses and patients place on high quality engagement (Moreno-Poyato et al., 2016), yet also implies divergence between patients' expectations of engagement, and what they receive in clinical practice. For example, this review found patients valued when nurses respected their decisions about their own care, however contemporary literature still indicates that patients' opinions are not always fully considered and paternalistic modes of care still dominate (McCann et al., 2008). It is imperative that measures are taken to address this disparity, and improve the quality of engagement, particularly as service-user led research has found the quality of nurse-patient interactions the most important aspect of care (Gilburt et al., 2010). The review describes engagement in such a way that addresses the challenge of engagement's complexity, thus making it easier to identify areas where poor quality engagement may occur. Interventions can then be targeted to improve those areas.

As previously discussed, some notable initiatives to improve engagement have been implemented, predominantly based around Protected Engagement Time (as described in the introduction) (e.g. Dodd et al., 2017; Edwards, 2008; Nolan et al., 2011; Molin et al., 2018; Thomson and Hamilton, 2012). Some studies found PET increased opportunities for engagement (Dodd et al., 2017; Edwards, 2008; Nolan et al., 2011), yet, to date, no intervention has been found that improves either the quality of engagement, or patients' satisfaction of care (Dodd et al., 2017; Edwards, 2008; Molin et al., 2018). Impacts on the quality of care were found to depend on the capability, opportunity and motivation of nurses to engage (Dodd et al., 2017; Molin et al., 2018). However, PET emerged from ward practice (Nolan et al., 2016), rather than being theoretically informed, thus opportunities to address these essential behavioural targets may have been missed. By mapping specific nurse-patient engagement behaviours to the COM-B/TDF theoretical framework (Cane et al., 2012; Michie et al., 2005) the review addresses this issue, and can be used to develop interventions that target nurses' and patients' capabilities, opportunities and motivations to engage.

Table 3 demonstrates the complexity of the behavioural context of engagement. To unpick this complexity Michie et al. (2014) recommend considering – as a pragmatic approach – the likely impact, spill over, and ease of implementation and measurement to identify behavioural targets. As engagement works within a system of many interdependent behaviours, prioritising two or three key behaviours is encouraged (Atkins et al., 2017). Applying these criteria to Table 3 suggests three promising behavioural domains, which if targeted, have potential to improve nurses' capability, opportunity and motivation (COM-B) to engage:

1) C: Knowledge (e.g. educating nurses about the Principles of Engagement)
2) O: Environmental context and resources (e.g. environmental and procedural restructuring)
3) M: Emotion (e.g. improving clinical supervision)

Interventions may best be targeted to modify nurses' behaviour, as many patient behaviours were due to being acutely unwell, and have potential to change in response to a change in nurses' behaviour. These three behavioural domains will address both organisational and personal aspects of engagement, which nursing scholars argue is imperative to the success of engagement (Lawes et al., 2018; McKeown, 2015; McKeown et al., 2017). Although clinical supervision is a well-established practice within mental health nursing its success is dependent on sufficient support systems (Bifarin and Stonehouse, 2017), and the personality and skill mix of the people involved (Ali and Panther, 2008). Furthermore, organisational change such as environmental and procedural restructuring may appear relatively easy to implement, however is frequently imposed through top-down approaches that do not take account the views of frontline staff (Laker et al., 2014). This often results in poor uptake of change innovations (Coetzee and Stanz, 2007).

The barriers mentioned above require a new and novel approach if we want to truly see behaviours change and engagement improve. Although the components of the conceptual model and the behavioural targets have been developed from peer-reviewed literature, and represent a good starting point for intervention development, they will require further iterations through collaborative research methods. This is particularly important as the main limitation of this review is that the patient voice was not equally represented, with a majority of studies only considering engagement from the nurses' perspective. Previous research has shown divergence between both patients' and nurses' and frontline and managerial staffs' expectations of care (Laker et al., 2014; Hopkins et al., 2009; McAllister and McCrae, 2017). Moving forward we aim to further develop the model and use the results of this review, alongside Experience-based Co-design (Bate and Robert, 2007), to bring patients, carers and both frontline and managerial staff together to co-design an intervention to improve engagement on an acute mental health ward.

6. Conclusions

People with mental health problems admitted to acute wards could benefit from improved engagement if current evidence and theory can be utilised in a way that moves the field forward in truly understanding the process of engagement, and how to effectively target interventions to positively influence nurse and patient behaviours. The use of a shared conceptualisation of engagement could enable more rapid advances in the development of approaches to improve engagement in practice. Commissioners and policymakers could use the shared language to set standards, which engagement could be evaluated against. The formulation of a holistic understanding of the essential components of engagement may make it easier for nurses to recognise what they do, and to do it well. The model can be used to generate testable hypotheses about how and where to target behavioural change interventions. The Principles of Engagement must be reflected in the development of interventions to improve engagement, and the co-design process must involve patients, carers and staff throughout.

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Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:https://doi.org/10.1016/j.ijnurstu.2019.02.013.

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4.3 Rationale for a systematic integrative review

An initial scoping exercise (described in more detail in section 4.4.1) found that the phenomenon of nurse-patient therapeutic engagement had been studied through an array of methods including empirical, theoretical, quantitative and qualitative. Furthermore, the literature predominantly comprised of nursing research that may not be considered high on the evidence hierarchy. An integrative review approach encourages the inclusion of literature with diverse methodologies such as experimental, non-experimental, qualitative and quantitative data. It allows a summary of empirical and/or theoretical literature (Hopia et al. 2016), can contribute to the development of theory and has direct applicability to clinical practice (Whittemore & Knafl 2005). While other methods of review such as systematic reviews and meta-analyses are important to evidence-based practice, these may over-emphasise the importance of randomised controlled trials within the hierarchy of evidence (Kirkevold 1997, Evans & Pearson 2001). Thus, an integrative review was deemed appropriate to capture the depth and breadth of the nursing research in this area and suitable for the aim of developing a conceptual model of therapeutic engagement.

While a key strength of an integrative review is that it combines studies with diverse methodologies (Whittemore & Knafl 2005), there are inherent complexities that may create biases and a lack of rigour (Siddaway et al. 2019). To overcome this, the review followed the five stages of Cooper's framework: (1) problem identification; (2) literature search; (3) data evaluation; (4) data analysis and (5) presentation (Cooper 1998). These stages are similar to that of a systematic review (Moher et al. 2009) and enable a methodical, reliable and transparent approach to identifying literature, applying eligibility criteria and defining pre-determined search terms (Soares et al. 2014). Table 8 sets out my decisions at each stage of the integrative review process.

Table 8 – Decisions at each stage of the integrative review process

Stage of review	Decisions
Problem identification	Currently the concept of therapeutic engagement lacks a succinct elucidation which leaves nurses open to adopt a variety of poorly articulated approaches to patient engagement. To clearly articulate the contributions that mental health nurses make in terms of patient engagement, a clearer understanding of the constituents of therapeutic engagement is needed, including how nurses carry out engagement in practice and what factors influence this. From this a common language can be used to describe what is meant by therapeutic engagement, and targeted strategies to improve engagement can be developed and implemented.

Literature search	*Search strategy*: Use the SPICE Framework to develop the preliminary search strategy and relevant terms *Databases*: CINAHL, PsycINFO, Medline, BNI and the Cochrane Library. In addition, I will search reference lists of included studies and contact relevant experts in the field to identify any unpublished research if there is reason to think there may be unpublished work. *Hand searching*: Reference lists of included studies and relevant review articles identified from the scoping exercise.
Data evaluation	*Review sample*: empirical and theoretical reports, including studies with qualitative, quantitative and mixed methods. Evaluate methodological quality using tools relevant to the type of research in each manuscript: - *Mixed-method research*: Mixed Methods Appraisal Tool (Pluye et al. 2011) - *Qualitative research*: Critical Appraisal Skills Programme checklists (CASP 2014) - *Quantitative research*: STROBE checklist for cohort, case-control and cross-sectional studies (von Elm et al. 2008)
Data analysis	Combining studies with varied methodologies can be complex (Sandelowski et al. 2006). To reduce bias and inaccuracies and improve rigor an explicit and systematic method informed by Miles & Huberman (1994) was used. To enable the integration of both qualitative and quantitative data, quantitative data will be converted into qualitative themes to generate a single overarching synthesis. The COM-B framework (Michie et al. 2014) will be used as an *a priori* framework to identify influences on engagement.
Presentation	Data synthesis in the form of a provisional conceptual framework was developed to comprehensively unpack the concept of therapeutic engagement within acute inpatient mental health services.

4.4 Search strategy

Critical to the rigour of any review is a well-defined search strategy (Pope et al. 2007). Searches that are incomplete or introduce bias may result in an inadequate selection of papers or the reporting of inaccurate results (Conn et al. 2003). A systematic approach was applied to this review, which enhances the reliability of the search strategy (Aveyard 2010). The search was conducted in three stages: a scoping exercise, a database search, and a hand search.

4.4.1 Scoping exercise and search terms

A preliminary scoping exercise was carried out using the CINAHL database. A combination of the search terms therapeutic engagement, therapeutic alliance, therapeutic relationship, nurse-patient interaction, acute psychiatric, psychiatric inpatient, mental health, concept, theory, model, characteristics, attributes and features were used. This was based on discussion with my supervisory team and a library specialist about synonyms related to the key concepts of the review i.e., concepts or models of nurse-patient therapeutic engagement on acute mental health wards. The scoping exercise provided insight into the range of available literature and to identify common key words used in the therapeutic engagement literature. This then informed a systematic search strategy and formulation of eligibility criteria based on the available literature. In addition to the scoping review, the SPICE Framework (Booth 2006) was used to develop the review question and overall scope of the review, including eligibility criteria and search strategy (Box 1).

Box 1 – SPICE framework applied to the review question, eligibility criteria and search strategy

Setting: Acute mental health wards. An acute care setting is described as any hospital and/or inpatient service that provides mental health care for patients going through a period of acute psychiatric illness (NHS Confederation 2012)

Perspectives: Patients (18-65) and mental health nurses (and other mental health clinicians e.g., health care assistants, medics, occupational therapists etc.)

Intervention/phenomenon: Nurse-patient interaction that can be considered therapeutic engagement

Comparison: What do nurses do that is therapeutic engagement compared to what they do that is not therapeutic engagement from the perspectives of clinicians and patients?

Evaluation: Identify what clinicians and patients consider to be therapeutic engagement and what is not therapeutic engagement. Consider the barriers and facilitators and systemic processes that augment or impede therapeutic engagement. Synthesise any current theoretical knowledge on therapeutic engagement

One challenge was to achieve balance between sensitivity i.e., retrieving a high proportion of relevant articles and specificity i.e., retrieving a low proportion of irrelevant studies (Higgins & Green 2011). The use of broad terms such as "therapeutic" resulted in a greater number of hits than using more specific terms such as "therapeutic engagement". A smaller number of hits meant that the identification of relevant literature was more manageable, however it was noted that using more specific terms excluded relevant papers that had been identified in the scoping review. Therefore, it was decided to use the broader term so as not to inadvertently exclude important literature within the review. Table 9 shows the search terms that were used, informed by the scoping review and specific elements of the SPICE framework.

Table 9 – Search terms and facets

Facet 1: Setting	AND	**Facet 2: Perspectives**	AND	**Facet 3: Intervention/Phenomenon**
MM "Hospitals, Psychiatric" OR acute psychiatric OR mental health inpatient		MH "Psychiatric Nursing+" OR "mental health nurs*" OR "psychiatric nurs*" OR patient*		MM "Nurse-Patient Relations" OR therapeutic OR engagement OR activity OR interaction* OR "nurse-patient contact" OR "one-to-one"

				OR 1:1

4.4.2 *Database search*

It was important to use a variety of databases to increase the coverage of different types of evidence, whilst minimising potential overlap (Pope et al. 2007). Five electronic databases were systematically searched: CINAHL, PsycINFO, Medline, BNI and the Cochrane Library. The review was interested in international nursing literature, thus CINAHL was selected as it is the most relevant to nursing research (Polit & Beck 2012). However, CINAHL is reported to have a North American bias (Aveyard 2010), thus, to ensure the inclusion of international literature, BNI was also searched as it would provide access to British nursing literature. Medline similarly offers a large, generic database with access to international nursing literature (Bettany-Salkikov 2012), with nursing scholars recommending the combined use of Medline and CINAHL to identify the most nursing-related results (Subirana et al. 2002). PsycINFO was selected due to its specificity to mental health research (Nieswiadomy 2008). The Cochrane Library was selected as it includes evidence from high quality systematic reviews and health interventions. Collectively it was anticipated that these databases would identify a broad range of international literature.

4.4.3 *Hand search*

While electronic databases are effective in identifying literature, indexing problems may result in the identification of only 50% of studies (Conn et al. 2003). Hand searching to identify additional literature is a recognised tool to accompany systematic database searches (Armstrong et al. 2005). Reference lists of all included papers and relevant review articles identified in the scoping exercise and electronic database search were hand searched (e.g., Cleary et al. 2012; McAndrew et al. 2014 and Sharac et al. 2010).

4.5 **Quality appraisal**

Quality appraisal constitutes a crucial stage of any review (Cooper 2010); however, challenges remain when appraising the methodological quality of studies with diverse designs (Pace et al. 2012). Appraisal tools must be chosen with caution as there is no consensus for use; many lack evidence of validity and reliability with little empirical foundation (Crowe & Sheppard 2011). With this in mind, methodological quality of the empirical research was evaluated using tools relevant to the type of research in each manuscript. Qualitative research was evaluated by the Critical Appraisal Skills Programme checklists (CASP 2014) and quantitative research was appraised by the STROBE checklist for cohort, case-control and cross-sectional studies (von Elm et al., 2008). Both tools are widely used and recommended by the EQUATOR network, which is an international initiative that promotes the accurate and transparent reporting of studies by using robust reporting guidelines (Equator Network 2020). The Mixed Methods Appraisal Tool (MMAT) (Pluye et al. 2011) was used to assess the methodological quality of the mixed-methods studies included in the review. The MMAT, currently, is the most comprehensive tool for assessing studies with multiple methods (Crowe & Sheppard 2011). Its content validity (Pluye et al. 2009) and reliability have been tested, with reliability ranging from fair to perfect depending on criterion (Souto et al. 2014).

4.6 Updated integrative review

A further systematic search based on the original search strategy was conducted in January 2021 to identify and appraise any relevant studies published after the initial review (as published in May 2019).

4.6.1 Study selection

The search yielded a total of 417 papers across the CINAHL, PsycINFO, Medline and Cochrane library databases. The BNI was unable to be accessed as King's College London no longer holds a subscription. 49 duplicates were identified and removed, resulting in 368 studies. From this, 368 full titles were screened, 15 relevant abstracts were reviewed of which five full texts were assessed. Four of these were not eligible because they did not examine therapeutic engagement as a stated aim, resulting in one study included in the updated review.

4.6.2 Study characteristics

The included study was conducted in the UK and used focus groups to explore the ways in which seven mental health nurses and 12 HCAs therapeutically engage with individuals with a diagnosis of personality disorder in acute mental health units. Table 10 shows the study characteristics along with a summary of its main findings.

Table 10 - Study characteristics table for updated review

Author/Year/Country	Aims	Methods	Sample/Setting	Constituents/Concepts	Influencing factors
Acford & Davies (2019) United Kingdom	To explore the ways in which front-line nursing staff therapeutically engage with individuals with a diagnosis of PD	**Design**: Qualitative **Data collection**: Focus groups **Data analysis**: Thematic analysis by Braun & Clarke (2006)	**Sample**: Convenience sample of seven registered mental health nurses and 12 HCAs **Setting**: Acute mental health wards and psychiatric intensive care units	- Knowing the right time to engage e.g., when service user was calm - Selective disengagement when needed - Acknowledge problems in an honest manner - Setting boundaries e.g., allocating a set amount of time for engagement - Completing care plans with service users and using tools to engage	- Own emotional wellbeing and emotional resilience can impact on engagement - Not taking violent incidents personally otherwise it will impact on engagement - Knowing the individual and having a formulation helped with engagement - Team dynamics and ensuring a unified approach - Engagement was easier when the admission had a clear plan and structure to it

4.6.3 Main findings and discussion

Similar to the initial review, constituents of engagement included nurses using their clinical judgement to choose when to engage and when to disengage (Acford & Davies 2019). This aligns with the principle “choosing the right approach” (McAllister et al. 2019). For service users with personality disorder this study found that engagement was deemed most beneficial when the individual was calm. Nurses also agreed that setting boundaries relating to the time they can commit for therapeutic engagement was important (Acford & Davies 2019), in line with the principle of “authoritative vs. emotional containment” (McAllister et al. 2019). Of interest was that this study identified care planning as an important tool for engagement. This was not identified in studies included in the initial review, and despite being a vital aspect to service users’ care and recovery during an inpatient admission literature suggests that nurses often do not engage service users when formulating care plans (Rio et al. 2020).

Within this study, influences on engagement could be identified across the capability and motivation domains of COM-B (Michie et al. 2014). More specifically nurses suggested that their own emotional wellbeing and resilience influenced therapeutic engagement and a ward culture that ensured a unified approach to patient care supported nurses to therapeutically engage. One influence that was not identified in the initial review was that nurses felt that engagement was easier if there was an agreed structure to an individual’s admission. If this was lacking, nurses “did not know what to do” and felt the ward was a “holding pen” for individuals with personality disorder (Acford & Davies 2019). People who suffer from personality disorder may not need pharmacological treatments unlike those with schizophrenia or bipolar disorder who are more commonly treated on acute wards (NICE 2009). This study further highlights the over reliance that nurses place on pharmacological treatments over therapeutic interactions, as shown in much previous research (Cutcliffe & McKenna 2018). To enable nurses to become confident in their interactions with service users and rely less on pharmacological treatments for mental health problems, clear guidance is needed. This further highlights the importance of having a framework to base engagement on, such as the “Principles for Engagement” developed in the initial review.

4.7 Chapter summary

This chapter has identified the evidence base and defined the problem relating to therapeutic engagement. The original and updated systematic integrative review have conceptualised therapeutic engagement by presenting five principles of high-quality therapeutic engagement.

These include understanding the person and their experiences, facilitating growth, the therapeutic use of self, choosing the right approach and authoritative vs. emotional containment. These principles are influenced via a range of factors that span across nurse and service user capabilities, opportunities and motivations to engage. The “Principles of Engagement” and their influencing factors have been culminated into a conceptual model of nurse-patient therapeutic engagement on acute mental health wards. This model will be further validated with service users, carers and clinicians and used throughout the remainder of this thesis to articulate what high-quality engagement should look like. It will also be used as a basis to identify potential intervention targets that can positively influence nurses’ behaviour towards engaging therapeutically with service users.

CHAPTER FIVE
PHASE 2A PART ONE: THE EXPERIENCE GATHERING PHASE

5.1 Chapter overview

Chapter 4 identified the evidence base and defined the problem relating to therapeutic engagement. It did this by conducting a systematic integrative review that concpetualised nurse-patient therapeutic engagement on acute mental health wards and used the COM-B model (Michie et al. 2014) and TDF (Cane et al. 2012) to identify potential influences on engagement. This culminated in a conceptual model of therapeutic engagement that formulated five constructs of high-quality engagement, called the "Principles of Engagement". These principles will be used as a common language to articulate what is meant by engagement throughout a co-design process. Of particular relevance to this chapter is that the integrative review found limited data that explored service users' or carers' experiences and needs of therapeutic engagement. Using EBCD to co-design an intervention to improve therapeutic engagement will enable service users, carers and clinicians to have a shared and equal voice throughout the co-design process (Bate & Robert 2007), thus ensuring intervention development is rooted in the needs of those who will use and deliver it. This chapter describes the first part of Phase 2a: the experience gathering phase and is presented as a published paper. Due to word count restrictions in academic journals, this chapter will also describe certain aspects of the study in more depth after the published paper. This will include further detail about the sample and recruitment methods, data collection and analysis methods and the links between the conceptual model of engagement presented in the previous chapter and the participant interviews presented in this chapter.

The study presented in this chapter is published in the following paper:

McAllister S., Simpson A., Tsianakas V. & Robert G. (2021) "What matters to me": A multi-method qualitative study exploring service users', carers' and clinicians' needs and experiences of therapeutic engagement on acute mental health wards. *International Journal of Mental Health Nursing* **30**(3), 703-714.

All study documents, including HRA approval, participant information sheets and consent forms are presented in Appendix B.

5.2 Published paper

International Journal of
Mental Health Nursing

International Journal of Mental Health Nursing (2021) ••, ••–•• doi: 10.1111/inm.12835

ORIGINAL ARTICLE

"What matters to me": A multi-method qualitative study exploring service users', carers' and clinicians' needs and experiences of therapeutic engagement on acute mental health wards

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ABSTRACT: *Nurse–patient therapeutic engagement on acute mental health wards is beneficial to service users' outcomes and nurses' job satisfaction. However, engagement is not always fulfilled in practice and interventions to improve engagement are sparse and ineffective. We explored the experiences of service users, carers, and clinicians drawing from 80 hours of non-participant observations in an acute mental health ward and semi-structured interviews with 14 service users, two carers, and 12 clinicians. Analysis of these data resulted in 28 touchpoints (emotionally significant moments) and eight overarching themes. Service users, carers, and clinicians identified a lack of high-quality, person-centred, collaborative engagement and recognized and supported efforts to improve engagement in practice. Potential solutions to inform future intervention development were identified. Our findings align with previous research highlighting negative experiences and support the need to develop multicomponent interventions through participatory methods.*

KEY WORDS: *clinician experience, nurse–patient interaction, nursing interventions, patient experience, qualitative.*

INTRODUCTION

Nurse–patient therapeutic engagement is central to mental health nursing practice (Peplau 1952) with policy initiatives globally supporting its delivery in practice (Australian Nursing & Midwifery Board 2016; Department of Health 2006). Engagement is experienced as therapeutic when nurses interact with service users by listening, understanding, and responding to needs while creating an environment that facilitates emotional and personal growth (McAllister *et al*. 2019). However, evidence suggests that nurses struggle to enact therapeutic engagement (McAllister & McCrae 2017; McKeown 2015). One study found that an average of 84% of service users on an acute ward were socially disengaged at any time of day (Radcliffe & Smith 2007). When engagement did occur, it was often task orientated and instrumental (McAllister & McCrae 2017), and research suggests that both service users and nurses are dissatisfied with this aspect of care (Rose *et al*. 2015). Thus, there is an imperative to generate an understanding of the needs and experiences of both service users and clinicians to inform practice development in this area.

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Authors' contributions: All authors involved in this manuscript meet the authorship criteria and agree with the manuscript. SM conceived of the study, secured the research funding, conducted and analysed the interviews, and wrote the manuscript. GR, AS, and VT participated in the design and coordination of the study, contributed to the analysis, and helped to draft the manuscript. All authors read and approved the final manuscript.

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BACKGROUND

It has long been known that high-quality, readily available engagement has a significant positive impact on the quality and outcomes of mental health nursing care (Farrelly *et al.* 2014). Service users report better perceptions of inpatient care (Wykes *et al.* 2018), and nurses report greater job satisfaction, leading to fewer sick days (Moreno-Poyato *et al.* 2018), which reduces the use of costly agency nurses who are unfamiliar to service users and the wards. Conversely, poor engagement is associated with increased levels of violence and aggression (Chaplin *et al.* 2006) and rates of absconding (Bowers *et al.* 2009). However, research from Australia, Canada, Finland, the United States of America, and the United Kingdom shows a lack of high-quality engagement in practice (Sharac *et al.* 2010).

The need to maintain safety, order and manage acutely unwell people who may exhibit challenging behaviours places pressure on nurses (Csipke et al. 2014). To cope, nurses may employ custodial methods of care which create a barrier to effective engagement (Cutcliffe *et al.* 2015). Additionally, ward practicalities such as reduced staff and administrative duties mean nurses must attempt to fulfil organizational demands alongside one-on-one nursing care (Wyder *et al.* 2017). This overwhelming workload often results in care left undone (Shattell *et al.* 2008). Nurses feel guilty and inadequate (Chambers *et al.* 2015) and may stop engaging as a means of self-protection from this emotional burden (Cleary *et al.* 2012; Gabrielsson *et al.* 2016).

While these are long-standing problems, few interventions seeking to improve engagement have been implemented. Evaluations report improvements in the amount of engagement; however, the quality of that engagement remains a persistent problem (Molin *et al.* 2018). Engagement is clearly a personal act, and understanding how it is experienced by those who both receive and deliver it may give important insights into improving its therapeutic value. National and international policies recommend the participation of service users in all aspects of mental health care, including safety and quality initiatives (Australian Government 2017, Mental Health Taskforce 2016). However, equal and active service user and clinician involvement in developing interventions to improve engagement has not been evident. Thus, the aim of this study is to gain an understanding of i) how engagement is experienced on acute wards and ii) the needs of service users, carers, and clinicians to inform future collaborative intervention development.

METHODS

Design

Data collection was undertaken as part of a larger study that used Experience-based Co-design (EBCD), a form of participatory action research (Robert *et al.* 2015), to co-design an intervention to improve nurse–patient therapeutic engagement on acute mental health wards. This paper reports on the first phase of the EBCD approach – the experience gathering phase, which uses non-participant observations and semi-structured narrative interviews to develop a collective understanding of service user, carer, and clinician experiences. This collective understanding is then used to co-design solutions that are service user, carer, and clinician centred (Bate & Robert 2007). The data on which this paper draws comprised 80 hours of non-participant observation on an acute mental health ward in inner London and 28 interviews with service users, carers, and clinicians at the participating mental health service as we sought to explore and understand their experiences of therapeutic engagement as the first phase of intervention development. This paper is reported using the COREQ guidelines for reporting qualitative research (Tong *et al.* 2007).

Participants

A convenience sample of service users and carers were recruited through face-to-face meetings, posters, and emails at community mental health teams and advocacy groups connected to the participating organization. A whole population sample of clinicians from one ward were invited to participate via presentations, posters, email, and face-to-face meetings. SM screened all participants, specifically looking for service users and carers who had, or had cared for somebody who had, at least one inpatient admission at the organization but was not currently experiencing mental ill health. All clinicians on the participating ward were eligible. A total of 28 people participated in semi-structured interviews, including 14 service users, two carers, eight registered mental health nurses, three healthcare assistants (HCAs), and one psychological therapies clinician. Just under half were female (46%), and 35% were from a Black, Asian, minority ethnic background. Participants' ages ranged from 18 to 64 years, and service user diagnoses included psychotic disorders (57%), mood disorders (21%), and personality disorder (14%).

Data collection

Data collection took place between May and November 2019. Ethical approval for the study was obtained from the London Fulham Research Ethics Committee (reference: 18/LO/2193). Written consent was obtained prior to interviews. Permission for observations was obtained at unit level before the study started. Posters explaining the purpose of observations were displayed in common areas of the ward. Participation in observations was on an opt-out basis, although nobody declined to be observed.

SM (a female mental health nurse trained in qualitative research methods, unfamiliar to the ward) conducted 80 hours of non-participant observations between the hours of 0730-1500 or 1330-2130, Monday through Sunday. The ward manager highlighted these as the times that most nurse–patient interaction would occur. Observations were performed in 15-minute intervals, beginning with the first nurse encountered and continued until all nursing staff had been observed. Field notes were recorded on a tablet device and focused on nurse–patient interactions, guided by Tyson *et al*. (1995). This included tone of voice, body language, patterns of behaviour, nurse–patient dynamics, influences on interactions, and general ward atmosphere (see Appendix S1 for observation template). Observations were primarily conducted on a non-participant basis, so as not to influence nurse or service user behaviour. When approached, SM had informal chats with service users and clinicians.

On completion of the observations, SM conducted 28 semi-structured interviews supported by a topic guide (Appendix S2). The topic guide was informed by a previously published systematic integrative review conducted as part of the wider study (McAllister *et al*. 2019), the observations, and behaviour change theory (Cane *et al*. 2012; Michie *et al*. 2014). Interviews explored participants' experiences of engagement and what they understood by the term, influences on engagement, and clarifying assumptions made from the observations and preceding interviews. The topic guide was piloted with a service user member of our advisory group and a nurse not related to this study. Interviews were conducted at a place of the participant's choice, for example university or community mental health team premises, or telephone and lasted between 30 and 80 min. Interviews were audio-recorded; in addition, six service users and one carer were filmed for the purpose of the wider study (Bate & Robert 2007).

Data analysis

SM independently coded and themed observation and interview data and discussed findings with AS, VT, and GR. Findings were validated with seven service users and six clinicians at two feedback workshops.

Observation field notes were uploaded to NVivo and thematically analysed (Braun & Clark 2006). Words, phrases, and scenarios throughout the field notes were coded, focusing specifically on the nature of and influences on nurse–patient interactions. Codes were grouped into sub-themes until the analysis reflected the overall story of nurse–patient interactions on the ward.

Interviews were transcribed by a professional transcriber and uploaded to NVivo. Words and phrases specific to individuals' experiences and interactions were coded. As per the EBCD approach, these codes were grouped into 'touchpoints' (emotionally significant moments) (Bate & Robert 2007). Once all transcripts were coded, touchpoints were categorized into overarching themes. Sub-themes from the observations were mapped against the themes and touchpoints from the interviews. A reflexive process that constantly challenged the researcher's assumptions such as the influence of being a mental health nurse was supported by discussion amongst the study team, participant validation, and a reflective diary. This was undertaken throughout the study.

RESULTS

Five themes associated with service user/carers and two themes related to clinicians were identified. These described needs and experiences of engagement on the ward. An eighth joint theme was identified where participants proposed potential ways of enhancing therapeutic engagement. Both observational and interview findings are discussed below under these eight overarching themes. Table 1 demonstrates how the observational data mapped onto the interview data and how the touchpoints were merged into the five overarching service user/carer and two clinician themes. The joint theme is not included within Table 1 but is presented in its own table at the end of these findings.

SERVICE USERS AND CARERS

Do not dismiss me

Service users and carers often felt their concerns were not acknowledged or taken into consideration. Nurses would either not listen, blatantly ignore, or pathologize service

TABLE 1 *Coding framework with observation data mapped onto participants' interview data*

Observation sub-themes	Touch points from interviews	Overarching themes
Service users and carers		
Dismissive of service users	Nurses did not take my concerns into consideration	Do not dismiss me
	Nurses did not take my physical health seriously	
	Nurses blamed my reactions on my mental health	
Attending to immediate needs	Please respond to my requests in a timely manner	
Giving mixed messages/not explaining things/not giving reasons for decisions	Please explain what you are doing	When you tell me something, please give a reason
	Be clear about your reasons for doing something	
	Introduce yourself to me	
	Do not coerce me into doing something	
Length of interactions	All you need is to listen	Please just give me some of your time
Missed opportunities	I was left on my own	
	Lack of engagement results in fear and misunderstandings of my problems	
Setting the tone for interactions	Treat me like a human being	Validate me as a person
	Please approach me/help me to approach you	
Keeping cool in heated situations	Forgive and forget	
Length of interactions	Understand me and my situation	
	Nurses are on the computer all day	Unhelpful behaviours
Ward layout	I need privacy for one-to-ones	
Repetition	Nurses give me robotic, one-size-fits-all care	
Following procedures/robotic care		
Clinicians		
Giving mixed messages	We want better team relations	Improving ward culture
	Needs to be more openness to change within the team	
	Improvement in staff-managerial relations	
	Improve the culture around response	
	Bring the fun back into the job	
Being on the shop floor	Create better bonds with service users	Improving interactions with service users
Medication rounds		
Length of interactions	Streamline working practices to create/free up time for interactions	
Named Nurse	Improve the way things are communicated to service users	
Communicating leave	Improve the way messages are handed over within the team	

users' actions rather than recognize that frustrations may be a result of being ignored or detained in hospital:

> There was no insight that my frustration wasn't a symptom of my mental health, it was a symptom of what had happened to me – SU3

Observations showed that when service users displayed frustration or anger, privileges such as Section 17 leave were threatened to be revoked. Over following days, some service users would then completely disengage from nurses – Field notes (22.06.2019)

One carer described how her loved one absconded from the ward, which might have been avoided if the nursing team had not dismissed her concerns:

> No way, it's not my fault he ran away! I said my concerns at the beginning when he was admitted…I said to them twice, he's not taking his medication…They said maybe it's better you take him and go back to Australia… – C2

In contrast, we observed times when nurses would be attentive to service users' immediate needs:

> Many Many interactions involve a service user approaching a nurse because they need something, for example to make a phone call or ask questions about their leave. These interactions are usually short (less than five minutes), but the service user appears satisfied when they are acknowledged and given this time – Field notes (09.06.2019)

When you tell me something, please give a reason

General dismissiveness was made worse when nurses would not explain their actions or decisions:

> A patient asks a nurse if he could be escorted on leave. The nurse ignores him and continues her conversation with another member of staff. The patient uses the nurse's name to get her attention, but still he is ignored. A bank HCA walks past and overhears the patient asking for leave but also ignores him and

> starts an unrelated conversation with the nurse. After saying the nurse's name three times she finally acknowledges the patient by saying 'just a minute' before walking off without further explanation. The patient is getting visibly agitated. The nurse comes back and approaches a permanent HCA and says 'can you take this one out' without looking at or acknowledging the patient. The HCA makes no attempt to take the patient out, then walks into the office. The patient asks again if anybody can take him out, to which the bank HCA responds [without looking at him] 'I'm not doing escorts'. The patient raises his voice as the nurse walks by again and says, 'there must be somebody who can take me out!' She rushes past, mumbles inaudibly under her breath and disappears. The patient tells me that this happens every day: 'Nobody explains what is going on, everybody says they're busy, but they don't look busy, she's just sitting there!' [pointing to the bank HCA]. He is very frustrated and says, 'I want to blow their (expletive) heads off'. After about 15 minutes, the permanent HCA emerges from the office, thrusts a piece of paper in the patient's face without explaining what the patient should do with it and says, 'let's go' – Field notes (29.05.2019)

Clearly, the HCA assumed that the service user knew she was going to take him out on leave, but this was not the case and the service user felt angry, upset, and confused. Interview data also highlight this:

> I guess the nurses just take it as a given that you know why you're there and you know what to do to get better, but sometimes people are so out of it that they're not even aware that they're on planet earth – SU8

Conversely, when procedures were explained, observations showed that service users were immensely grateful:

> Thank you for explaining that to me. You're the first person who's explained that to me' said by a patient when the nurse took a couple minutes to properly explain how his leave worked – Field notes (07.06.2019)

When explanations were not given, some service users perceived care as harsh, intrusive, and coercive rather than caring or collaborative.

Please give me some of your time

Giving time was important to service users and carers alike. However, observations showed that time was hard to come by:

> Within each 15-minute time slot there is sometimes several 'interactions' but most of them are so transactional and short I cannot record it as anything – Field notes (01.07.2019)

Giving time could be fulfilled through simply listening, which was perceived as a highly therapeutic act as discussed by a carer:

> One thing that I've experienced directly myself and indirectly with my daughters is that listening could be the key to everything. . .We may think of. . .I don't know what strategy, what medication or what type of ward but honestly, listening could be the key to everything. Such an easy thing but I can tell you there is a lack of listening – C1

Opportunities to spend therapeutic time with service users were often missed by overworked clinicians, and hearing did not always lead to engagement, as illustrated in the following vignette:

> A service user made a phone call to an outpatient clinic. He was clearly anxious and confused which resulted in him saying he would not attend his appointment as he thought they were going to kill him. Two nurses heard the whole conversation, but did not approach him afterwards to explore his fears and anxieties – Field notes (07.06.2019)

In contrast, interviewees gave examples of how nurses would give their time in an *ad hoc*

> They just acted like a normal person. . .talking about general things, some sports and topical conversation pieces, playing basketball and just sort of being there, not just from the medication side of things cause otherwise I think people can form bonds or sort of start to stereotype people almost like, oh the nurses only give me my medication. – SU13

, informal way to conduct positive therapeutic work:

Informal interactions where conversation occurred naturally were considered to have the most therapeutic value and left service users feeling cared for, understood, and valued.

Validate me as a person

Giving time also helped service users feel validated as a human being:

> I celebrated my birthday on the ward. . .we did a pool competition, I won, it was really nice. . .the nurses also got me a cake, you know it was just a nice human experience with everybody. . .That was a good day. – SU11

It was evident that residual anger from past negative experiences could create tense, non-validating interactions. Observations showed several examples of when a nurse and service user began the day upset with each other due to the previous day's events. This resulted in interactions being fraught for the remainder of the day. On one occasion, a nurse defused the situation by engaging in conversation with the service user about the reasons for their upset. This helped validate the nurse's and service user's emotions, rather than making them feel that their feelings did not matter:

> The nurse was very open and frank about why she was upset, but she first allowed the patient time to speak freely about her anger. As the conversation progressed the patient became visibly less tense. They both apologised and ended the interaction with a hug (Field notes – 25.06.2019)

Unhelpful behaviours

Service users and carers discussed three key issues that impacted negatively upon their experiences of engagement: staff prioritizing administrative duties over interactions, poor ward layout, and robotic, one-size-fits-all care. Carers felt that 'nurses don't have much time to spend with the patients' – C1 and service users concurred:

> He would just sit and write. I wanted to know what he was writing, why are you writing, not talking to me…they don't want to listen to my personal experience. – SU2

The ward was laid out along a corridor with the nursing station at one end and the service users' communal area at the other end. Nurses stayed around the nursing station where they took phone calls, wrote progress notes and met with other clinicians. As a result, nurses tended not to be in the vicinity of service users. To initiate interactions, service users had to enter 'nursing space'. This was not ideal for therapeutic interactions, as highlighted by our interviewees:

> They would say just come over to the nurses' station…I'll sit at one side, they'll sit at the other side and I thought actually that's not very helpful, it's not very private, people kept coming over…nurses would say I'm writing up notes and quite often that's an excuse not to have a one-to-one. – SU11

Nurses followed strict and rigid rules, which may have been to ensure order in an otherwise chaotic environment. However, it antagonized the service users:

> Section 17 leave had to be taken after morning handover at 0800. At 0800 a patient asked to take his leave. The nurse's immediate reaction was to ask him how many times he had been out on leave that day. He became annoyed and said, 'obviously I've not been out it's 8 am!' The nurse became defensive, rather than acknowledging the mistake and this set a bad tone for further interactions that day – Field notes (23.05.2019)

When nurses were strict and rigid, service users experienced interactions as robotic rather than person-centred:

> No one came to me and said, why are you so aggressive, they just said, oh it's cause you've got mental health problems…almost like a conveyor belt…come in, dose them up on medication…there was no one-on-one to explain what was happening. – SU3

CLINICIANS

Improving ward culture

All clinician interviewees discussed the need for cultural change. Many felt that relations within the multidisciplinary team were at an all-time low:

> The staff relationship it's not at its best now…a lot has to be done about that…when it's like that they are sitting on a time bomb which could explode. – Staff 10

Nurses feared for their safety, particularly when their team was unsupportive during incidents:

> The ward's emergency alarm rang. It was really loud, but nobody left the nursing station to investigate until the response team arrived. Even then the reactions from staff were slow, opting to leave responsibility with the response team rather than check on their colleagues who sounded the alarm – Field notes (23.05.2019)

This created a sense of mistrust within the team which led some nurses to withdraw from patient contact:

> If 90% or 70% of people can't do their job nobody will come to my rescue […] I became very aware that when there is an incident I'm left on my own…I stopped trusting the team…I couldn't rely, therefore I needed to take a step back from the patients – Staff 8

Others felt despondent by the perceived lack of managerial support when concerns were raised about staffing levels, serious ward incidents and team relations. This significantly impacted on their motivation to engage:

> People feel they're not heard, not listened to, not appreciated and overworked. Staff will say so what's the point? If I'm not appreciated, if I'm not getting the support and the backing, what's the point? – Staff 6

All interviewees discussed a desire for change; however, attempts to implement improvements were often not welcomed by the team:

> I've tried to implement one-to-one engagement on the allocation but as the saying goes, you can take a horse to water but you can't make them drink it…some people are very lazy, they can't be bothered…they've been in the system for years…they're tired – Staff 5

Improving interactions with service users

All participants felt there was a need to improve nurse–patient engagement on the ward:

> We need to interact more with patients because one of the major problems on the ward is because we are a little bit distant from the patients…we need to find a bond…create time, not just give them medication, just kind of engage with them. – Staff 9

However, medication rounds were often the only time a nurse would spend one-on-one time with service users. Observations showed some nurses took advantage of medication administration as an opportunity to engage in a more meaningful way:

> The nurse invites her [the patient] into the clinic room where as well as having morning meds, they discuss her anxieties about being discharged into supported accommodation. I can hear calming tones of voice and the patient was smiling when they left – Field notes (22.06.2019)

JOINT SERVICE USER, CARER, AND CLINICIAN THEME

Finding solutions

All interviewees discussed the negative impact that resource constraints, such as staffing levels, had on their ability to interact. However, many strategies for improving the quantity and quality of engagement were described. There were some similarities between service users', carers', and clinicians' solutions, although service users and carers focused more on relational aspects of care and clinicians focused more on ward routines and team relations. Examples of proposed solutions are given in Table 2.

VALIDATION AT FEEDBACK WORKSHOPS

Overall, service users, carers, and clinicians supported the findings above. Service users and carers also developed one new theme: 'help me help myself'. This theme stressed how:

> Nurses must create an environment conducive to self-improvement. Nurses could do this by explaining what would happen to service users during their admission and provide practical advice and support to prepare service users for life post-discharge – Field notes (31/10/2019)

Although elements of this were incorporated within the five service user/carer themes, participants agreed that this was central to improving the quality of engagement; thus, a distinct theme was necessary.

DISCUSSION

The findings above provide insights into how the lack of engagement impacts on individuals in acute mental health wards and paves the way for the future development of interventions to improve the quality of care. Overall, our findings suggest that service users, carers, and clinicians experienced frustration at the lack of engagement; however, the events that lead to that frustration are different. Our findings are in line with previous studies which employed observational techniques and also reported a general lack of engagement on acute wards (Altschul 1972; McKeown *et al.* 2019a; Quirk & Lelliott 2001). Barker and Buchanan-Barker (2005) highlight the importance of time when developing nurse–patient relationships. They conceptualize time as a 'gift' that can be offered to show respect and care towards individuals. Studies have shown that nurses can be deterred from engaging due to perceptions of time (Goulter *et al.* 2015; Shattell *et al.* 2008). Conversely, research that examines service users' perceptions suggests interactions should be easily available and relatively short (McAllister & McCrae 2017). This confirms our observations where service users appeared happy when nurses met their immediate needs with short, seemingly transactional interactions. This may be because acknowledgement is as important as what happens within the conversation. Thus, future interventions must prompt nurses to acknowledge service users when they need something, even if the interaction is brief.

Rather than being therapeutic, engagement was often a source of stress for participants. Clinicians were

TABLE 2 *Examples of potential solutions for intervention development*

Service user and carer solutions	Clinician solutions
Change the professional identity of the nurse so they are not just seen as the person who gives medications, for example by running events where nurses and service users interact through ordinary activities or off the ward (SU3, SU9, SU13)	Doing groups as a more efficient way to interact with service users (S7, S8) and/or have informal interactions, for example playing some music or going for a walk (S6, S7, S9, S12)
Streamline working practices to free up time for interactions, for example combining paperwork and making progress notes more efficient (SU6, SU7)	Streamlining of written handover notes and progress notes and reduce duplicate paperwork (S5, S7, S8, S9)
Appoint a compassion champion who takes a lead role in ensuring staff and service user wellbeing (C1)	Appoint a therapeutic engagement champion who promotes engagement (S6) or allocate engagement during each shift (S2, S5, S6, S7, S8)
More training for nurses on how to address service users' problems (run by service users) (SU7, SU8, SU11, SU14)	Training for staff, for example self-awareness training, a confidence boosting workshop (S4, S6, S9, S12)
Sessions for nurses and service users to meet post-discharge to help nurses see the benefits of their work, and for service users to discuss their experiences on the ward (C2, SU3, SU6, SU10)	Nurses stop administrative duties during mealtimes and sit with service users and have a cup of tea or some food and a chat (S1, S9)
Procedures and routines must be explained clearly to service users, rather than being taken for granted that they already know or understand (C1, SU3, SU7, SU8)	Increase time nurses have to run medication rounds as this is a great opportunity to engage with service users (S9)
Ask service users to provide feedback about the quality of nurse–patient interactions on discharge and areas they think can be improved (C1, SU1, SU6, SU13)	Debriefs and case formulation meetings after serious ward incidents or when challenging service users are admitted (S2, S7)
Taking a non-judgemental approach that accepts service users for how they are now, rather than what is said about them from past admissions (C1, SU8, SU11)	To ensure smooth handing over of information write doctors/nurse in charge of next shift an email at the end of your shift setting out the things that need to be handed over (S2)
Some service users find it difficult to open up about their feelings, so provide cards that display different emotions to help service users articulate their feelings and needs (SU11, SU13)	Emphasize the importance of doing activities with patients, for example a poster or screen saver saying that engagement is not slacking off, it is a legitimate therapeutic intervention (S1, S2, S9)

stressed due to the many competing demands on their time, as documented in a review of previous research (Cleary *et al.* 2012). Service users and carers were fearful of engaging as they had previously tried to initiate engagement, but were dismissed, ignored, or even penalized. Although stressed, clinicians still wanted to engage with service users. Research shows that when reality opposes ideals, feelings of guilt, frustration, and burnout ensue (Chambers *et al.* 2015). To protect themselves from these feelings, nurses may inadvertently disengage from service users and focus on more measurable tasks such as ward administration (Gabrielsson *et al.* 2016). Adequate staffing levels are key to ensuring safe, high-quality nursing care (Baker & Pryjmachuk 2016) and can reduce the use of coercive practices that negatively impact on engagement (McKeown *et al.* 2019b). To overcome these issues and relieve clinicians' stress and service users' fears, future interventions must address the organizational pressures that lead to these experiences and support nurses to respond in a more compassionate person-centred way.

A closely related issue was that of trust within the clinical team. Several nurses spoke about experiences of being injured by a service user and receiving little to no support from their clinical and/or managerial team. A systematic review on nursing and aggression in the workplace found that organizational support encouraged nurses to report violent incidents and was vital to enable recovery from the negative emotions these incidents triggered (Edward *et al.* 2014). When violent or aggressive incidents occur, nurses experience feelings such as trauma, anxiety, fear, rage, and sorrow (Camuccio *et al.* 2012; Edward *et al.* 2014). These emotions not only impact the individual, but may influence team dynamics, which results in uncertainty and even more fear (Cleary *et al.* 2005). Nurses react to this by reducing contact with service users (Duxbury & Whittington 2005), or strictly following standardized policies and procedures (Lakeman 2006). However, this may be counterproductive as nurses who are unavailable to service users have been found to be at higher risk of assaults (Whittington & Wykes 1994). In contrast, a virtuous circle could ensue, where improved engagement leads to fewer violent and aggressive incidents, reduced staff anxiety, less avoidant behaviour and overall a more peaceful ward environment for service users and clinicians (McKeown *et al.* 2019c). Any future intervention must enable teams to address poor dynamics and provide support to clinicians who may be struggling.

The need to be recognized and validated as a person was evident in the experiences of clinicians and service users. High workloads and unappreciative management made nurses feel dehumanized. In contrast, service users felt they were on a conveyor belt of care, where nurse–patient interactions were standardized. In recent years, publications such as the Francis Report (2013) have brought to light serious systemic failures through, amongst other things, the delivery of impersonalized, one-size-fits-all care. To overcome this, compassion when delivering nursing care has received renewed interest in both the UK and internationally (Department of Health 2012; Department of Health Western Australia 2012). These reports emphasize the need to create a common culture of care by engaging, listening to, and supporting service users, carers, and clinicians. We previously reviewed international literature and conceptualized engagement on acute wards and found that central to engagement was the need for nurses to listen and understand the person and their illness (McAllister *et al.* 2019); however, in mental health settings 'misrecognition' – when interactions are constantly invalidating – is a collectively generated and maintained phenomena. This significantly impacts on the well-being of service users, resulting in a diminished sense of self-confidence, self-respect, and self-esteem (Rashed 2019). Thus, interventions must support nurses to recognize, understand, and validate the individual and promote compassion for service users, carers, and clinicians alike.

The breadth of improvement strategies identified by participants reinforces the lack of a clear consensus around what constitutes optimal engagement, as supported by previous research (McAllister *et al.* 2019; Moreno-Poyato *et al.* 2016). It also shows that interventions to improve engagement must adopt a comprehensive approach to ensure they address the complex nature of engagement in practice. To date, interventions have focused on just one approach, predominantly improving nurses' opportunities to engage (Thomson & Hamilton 2012). Evaluations show these interventions are yet to realize improvements in the quality of engagement (Molin *et al.* 2018). A recent systematic review of interventions that addressed the nurse–patient therapeutic alliance (Hartley *et al.* 2019) which is a closely related concept to engagement, found just one intervention to have a significant improvement on the levels of inpatient therapeutic alliance as measured by the Working Alliance Inventory (Moreno-Poyato *et al.* 2018). The intervention was developed through participatory action research, and adopted a multifaceted approach, which included dedicated time for patient interactions, reflective groups for nurses and using research to inform practice. To maximize the chances of success, interventions should address a range of mechanisms (Craig *et al.* 2008; Michie *et al.* 2011).

There are limitations to our study findings. First, the interviews and observations were conducted with participants from one acute ward; the transferability of these results to other settings may be limited. However, the sample is varied and includes people of different ethnicities, genders, ages, diagnoses, and professional roles. Second, prior experience and understanding of engagement by the authors may have resulted in bias during interviews and analytical processes. Lived experience researchers doing data collection may have offered a different standpoint and outcomes. A combination would be interesting. However, the use of a reflective diary, study team discussions, and feedback workshops to moderate and critique our themes before arriving at the results sought to negate this potential bias.

CONCLUSIONS

Service users, carers, and clinicians want therapeutic engagement with each other; however, engagement is experienced as stressful for all because of an unsupportive, chaotic ward environment. First-hand experiences of engagement can serve as a guide to develop future interventions. The pragmatic solutions proposed by participants in our study do not require large amounts of money or sophisticated technology to develop and implement. But they would require service users, carers, and clinicians to work together to further develop, iteratively test, and implement these ideas in practice. Collaborative and participatory projects of this type could usefully adopt co-design processes, including creative methods and tools which place equal importance on the experiences and expertise of service users, carers, and clinicians alike. Such processes enable participants to share their emotional touchpoints (Bate & Robert 2007), as presented in this paper, providing a space for service users, carers, and clinicians to understand their emotions and experiences in relation to others. This shared understanding can foster collective action (Mulvale *et al.* 2020; Palmer *et al.* 2019) to ensure intervention development is guided by the needs of both those who will receive and deliver care.

RELEVANCE TO PRACTICE

While nurses aspire to improve engagement with service users, it is evident they may be underprepared and insufficiently supported to do so. Services must recognize and address the complex organizational contexts in which engagement occurs. Service users, carers, and clinicians must be treated as unique individuals, worthy of support and quality care. More guidance on the content of therapeutic engagement is vital to improving service users' and nurses' experiences. A collaborative approach to addressing these issues will ensure all points of view are considered and result in solutions that address not just one, but several aspects of engagement in practice.

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ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Ethical approval for the study was obtained from the London Fulham Research Ethics Committee (reference: 18/LO/2193). Informed consent was given by all participants.

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SUPPORTING INFORMATION

Additional Supporting Information may be found in the online version of this article at the publisher's website:

Appendix S1. Observation template.
Appendix S2. Topic guides.

5.3 Sample and recruitment

To develop an effective intervention, it is vital to understand and address the issues faced by key stakeholders (Murray et al. 2010). To facilitate a full and diverse understanding of the potential experiences and needs of therapeutic engagement it was initially intended to use a purposive sampling technique (Palinkas et al. 2015). I wanted to ensure that the individuals who were interviewed spanned a range of sociodemographic backgrounds, ages, genders, ethnicities and clinical backgrounds. Although my sample include participants from a diverse range of ethnicities, genders, diagnoses and professional backgrounds, it became clear that the employed technique was more aligned to convenience sampling rather than purposive sampling. I did not have access to a large enough sample to make decisions about who to recruit and who not to recruit based on their demographic details and after discussions with my supervisory team, it was decided that my sample was diverse enough to deem convenience sampling appropriate in this instance. Previous EBCD studies have emphasised the importance of recruiting participants with a range of perspectives (Chishom et al. 2018). Balancing insights from a variety of people increases the likelihood that interventions are both feasible and acceptable (Hackett et al. 2014). The EBCD toolkit (Point of Care Foundation 2020), recommends recruiting five to 15 service users and carers and five to 15 clinicians. This study was able to meet these recruitment targets. Service users who were recruited into the study were encouraged to invite one carer, family member or friend to participate, however none of the participants invited anybody to accompany them.

The recruitment strategy for service users and carers involved recruiting people from community mental health teams and service user advocacy groups connected to the participating Trust and is described below, including a presentation of how many people were screened, where they were recruited from and the reasons for exclusion:

1) Different Voices service user advocacy group
    - Screened: *n* = 4
    - Recruited: *n* = 3
    - Reasons for exclusion:
        i. The person did not attend the first meeting and did not respond to a follow up email
2) Patient and carer involvement project
    - Screening: *n* = 1
    - Recruited: *n* = 0
    - Reasons for exclusion:

        i. The person lived in Milton Keynes and said it was too far to travel in for the EBCD events

3) North Kensington and Chelsea Community Mental Health Team
   - Screening: *n* = 19
   - Recruited: *n* =6
   - Reasons for exclusion:
     i. Too much work to commit to the study
     ii. Had an inpatient stay within the past 6 months
     iii. Did not answer my phone calls after showing initial interest
     iv. After initial interest decided the project was not right for them
     v. Lacked capacity
4) South Kensington and Chelsea Community Mental Health Team and depot clinic
   - Screening: *n* = 25
   - Recruited: *n* = 7
   - Reasons for exclusion:
     i. Did not answer my phone calls after showing initial interest
     ii. After initial interest decided the project was not right for them
     iii. Did not turn up to the interview
     iv. Had an inpatient stay, but not in this country
     v. Had an inpatient stay within the past 6 months

Initially one of the exclusion criteria were that a person could not have had an inpatient stay within the past six months. This had been previously discussed with my PPI group and thought suitable because the project required a significant time commitment from the participants, thus I did not want the project to negatively impact on a person's recovery. However, throughout the recruitment process several service users voiced their displeasure at this exclusion criteria. Some told me that they felt it was very discriminatory because if a person was deemed well enough to be discharged from hospital, then that meant they had the capacity to choose what activities they involved themselves in. One participant told me that it almost made him decline to participate because he felt so strongly that it was discriminatory. With this in mind, an amendment was made to the research ethics committee to remove the 6-month post discharge criteria (see Appendix B2.1 and B2.2 for HRA initial favourable opinion document and the approved amendment notice).

5.4 Filmed interviews

Of particular importance to the experience gathering phase was to capture service user and carer interviews on film so this could be made into a trigger film and shown to clinicians at the joint co-design workshop, which will be discussed in more detail in the next chapter. As this was different to undertaking regular audio recorded semi-structured interviews, additional steps were taken to ensure that I was prepared for the process and could make the participants feel comfortable to share their experiences on film. I attended a half day training session delivered by Redweather Production that included practical information on how to use the filming equipment, how to angle the camera to produce the best-looking films and information on the safe and secure transfer of MP4 files. This session also included an element of role play where other colleagues and I practiced setting up the equipment and our opening lines for the interviews. We were required to write a script which we would learn and use with participants to help them relax in front of the camera.

Before I began an interview, I went through the participant information sheet (Appendix B3) with the individual and they signed an informed consent form (Appendix B3). As per the ethics requirements, before filming commenced participants were reassured that filming and/or the interview could be stopped if they became distressed or felt uncomfortable with the process. If they wished to continue the interview without being filmed, we could stop the video and an audio recorded interview could take place instead. If they did not wish to continue the interview at all, the data would be destroyed, and they could withdraw from the study without having to give a reason. They were also given the choice of stopping the interview but still attending the co-design events. None of the participants requested to stop and although some said they had initially felt nervous, by the end of the interview they said they had forgotten that the camera was there. Further details about the making of the trigger film will be provided in the next chapter.

5.5 Data analysis

The purpose of data analysis was threefold. First, individual narratives were to be used to explore individual's experiences and needs of therapeutic engagement, by identifying touchpoints (as reported in the paper above). Second, these individual narratives were to be used to verify the conceptual model of engagement and accompanying "Principles of Engagement" developed in Chapter 4, paper 1 (discussed further below). Third, the COM-B model (Michie et al. 2014) and TDF (Cane et al. 2012) were to be used to identify further influences on therapeutic engagement (data presented in the next chapter).

5.5.1 Touch points

Rather than using a traditional approach to data analysis, such as thematic analysis (Braun & Clark 2006) or interpretive phenomenological analysis (Smith et al. 2009), EBCD requires the identification of touchpoints, which represent the standout moments that are crucial to an individual's experience of a service (Bate & Robert 2007). It is often difficult to obtain this information from simply observing or talking to individuals, thus these individuals should play an active role in the creative process (Gage & Kolari 2000). This may be even more important in a mental health setting, where some authors argue that interpretation of service users' narratives via traditional paradigms can be misleading and disempowering (Faulkner 2017). There is a need for service users to reclaim their stories and take control of the direction of their narratives (Costa et al. 2012, Church 2013). By doing so, this enables the discourse to reflect what is important to service users (Glasby & Beresford 2006) rather than express the dominant biomedical paradigm of illness and/or recovery (Faulkner 2017).

As outlined in the published paper, this occurred by first identifying touchpoints from the participants' interviews, then validating these touchpoints with the participants at a feedback workshop. This ensured that service user, carer and clinicians' needs were at the heart of intervention development. Further details of the feedback events will be discussed in Chapter 6. Touchpoint identification was inductive and driven by the data, rather than using a pre-determined framework to guide analysis (Frith & Gleeson 2004). This allowed a pure interpretation of each individual's experiences and needs, through line-by-line coding of each participant's transcript, which then generated touchpoints that could be grouped together and put into overarching themes (as detailed in Table 1 of published paper).

5.5.2 Verifying the Principles of Engagement

A deductive analysis of interview data was undertaken to validate the "Principles of Engagement" identified in Chapter 4, paper 1. The five principles were used as an *a priori* framework to analyse and thematically organise the data. Data from each overarching theme related to the participants' touchpoints was read, then words, sentences and paragraphs from each theme was assigned to their relating principles until patterns and links between the themes and the "Principles of Engagement" could be made. This process was conducted by me (SM) and then reflections and assumptions about how the interview data fit with the principles were discussed during supervision sessions. The potential for adding additional principles were discussed with my supervisory team and service users and carers and at feedback workshop, however, it was decided that the potential additions could fit within the original framework and it was best to keep it simple rather than potentially confusing people with further principles. An example of this included where many service users discussed how engaging through an activity was considered very therapeutic. This common theme had not been specifically addressed in the review; however, it could be incorporated into the principle of choosing the right approach since nurses would not always engage through an activity and it would be down to their professional judgement whether engagement through an activity would be appropriate or not.

5.6 Implications of the findings for the conceptual model of engagement

Important insights from the service user and carer interviews and ward observations corroborated the findings of the systematic integrative review, thus strengthening the conceptual model and its underlying Principles of Engagement and confirming its alignment with the needs and experiences of service users and carers as well as clinicians. The service user theme “do not dismiss me” was closely aligned with the principles of understanding the person and their experiences, choosing the right approach and authoritative vs. emotional containment. Service users wanted nurses to acknowledge their concerns, however they often felt that their actions or frustrations were considered a result of their mental health rather than being a rational human response. If a nurse took time to understand the person and their experiences, this may help nurses to acknowledge the individual’s concerns (Mullen 2009). Further, the interviews and observations found that nurses often penalised service users for showing frustration and anger when they felt dismissed, thus aligning with the authoritative vs. emotional containment principle. Research shows that nurses withdraw from engaging due to fears about the length of time that interactions may take (Shattell et al. 2008, Goulter et al. 2015), however observations in this study showed that service users appreciated shorter interactions, particularly when immediate needs were required to be met. This aligns with the principles of choosing the right approach and highlights how nurses must skillfully tailor their approach depending on the needs of the service user (Delaney et al. 2014).

Service users greatly value the time that nurses spend with them, as is consistently shown in the acute mental health inpatient literature (Cleary et al. 2012, McAllister & McCrae 2017). The importance of giving time was evident in the themes of “validate me as a person” and “please give me some of your time”. Service users reported that some of the most therapeutic moments were when nurses simply listened and were present in the moment, which aligns with the principle of the therapeutic use of self. The theme of “when you tell me something, please give a reason” showed that when nurses took the time to explain their own actions and decisions and validated service users' feelings or actions this helped service users move on from negative experiences. It also helped them to understand the reasons behind certain treatment decisions, so they could participate in an informed manner, thus being enriched from the experience rather feeling anger or confusion towards a treatment, procedure or decision. This closely aligns with the principle of facilitating growth.

5.7 Reflexivity

Reflexivity is central to qualitative analysis and ensures transparency throughout the interpretive, analytical and reporting processes. It enables reflection "inward towards oneself as an inquirer; outward to the cultural, historical, linguistic, political, and other forces that shape everything about inquiry; and, in between researcher and participant to the social interaction they share" (Sandelowski & Barroso 2002, pg. 222). A reflexive diary can be used to document internal and external dialogue related to decisions made throughout the study process (Lincoln & Guba 1985). This can relate to considerations about the topic guide, the language used within the interview, interactions and dynamics between the interviewer and interviewee and any values or experiences that may influence the collection or interpretation of data (Tobin & Begley 2004). An example of my reflections during the interview process is given in Appendix B4. Attending a NatCen training course on storytelling and the conduct of narrative interviews, peer debriefing with other PhD colleagues and supervisory team meetings provided the space and opportunity for continued reflection on my own personal assumptions that may have influenced the conduct and interpretation of the narrative interviews. For example, I reflected often on my academic and clinical background in mental health nursing and how the topic of therapeutic engagement was close to my heart. I came into this PhD believing there were serious issues with engagement in practice, so I wanted to ensure that I did not always conclude that participants' experiences were negative. I made sure to identify and discuss the positive experiences within the interviews alongside the negative experiences.

As well as being reflexive on action, I was also reflexive in action (Schon 1983). An example of this was during the clinicians' interviews I made a mental note each time I felt I was becoming too familiar with the participant. I wanted to ensure that my reactions to their answers did not overly influence what they said next, while also wanting to make sure they felt comfortable to share intimate details of their experiences. By using the understanding I had gained about my own assumptions by reflecting on action I was able to identify times when I may have made an assumption about something too quickly, thus I could quickly backtrack during the interview and ask more probing questions to test my assumptions and gain a deeper understanding of the individual's experience. In addition to this an audit trail relating to data analysis was kept. This included many evolving thematic maps of initial assumptions and connections within and between the data. Therefore, the use of a reflexive diary, training, peer debriefing and an audit trail enabled reflection in and on action (Schon 1983) and enhanced the trustworthiness of the study's findings.

5.8 Chapter summary

This chapter has presented the first phase of the intervention co-design process: the experience gathering phase. Findings show that therapeutic engagement is important to service users, carers and clinicians and directly impacts on their experiences of being on an acute ward. Despite the desire for therapeutic engagement, findings show that currently therapeutic engagement brings about stress and anxiety in both service users and nurses alike. Nurses feel underprepared and unsupported to deliver therapeutic engagement, whereas service users feel that requests for therapeutic engagement often result in them being ignored, misunderstood or penalised. It is clear that a multifaceted approach that takes into account the complex context of engagement in practice will be vital to improving therapeutic engagement. Results support the findings in the previous chapter on the principles that make up high quality therapeutic engagement and ensure that the service user and carer voice are included within these principles. Identifying service user, carer and clinician experiences and needs is a critical step in intervention design. The process of using these experiences alongside the conceptual model of engagement will be presented in the following chapter.

CHAPTER SIX
PHASE 2A PART TWO: THE CO-DESIGN PHASE

6.1 Chapter overview

To fulfil the aim of developing a complex behaviour change intervention to improve therapeutic engagement, the integrative review, non-participant observations and semi-structured interviews presented in the preceding chapters developed and validated a conceptual model of nurse-patient therapeutic engagement on acute mental health wards that uses a common language to articulate what high quality engagement should look like in practice. It has also used the COM-B model (Michie et al. 2014) and TDF (Cane et al. 2012) to identify modifiable influences on therapeutic engagement. Further, the experiences and needs of service users, carers and clinicians have been explored in relation to therapeutic engagement through the first phase of EBCD, the experience gathering phase. This chapter brings the above work together and describes the second part of Phase 2a: the co-design phase and is presented as a published paper. Due to word count restrictions in academic journals, this chapter will also describe certain aspects of the study in more depth after the published paper. This will include further detail about the preparation and management of the feedback and co-design workshops and the process of intervention refinement.

The study presented in this chapter is published in the following paper:

McAllister S., Simpson A., Tsianakas V. & Robert G. (2021) Developing a theory-informed complex intervention to improve nurse-patient therapeutic engagement employing Experience-based Co-design and the Behaviour Change Wheel: an acute mental health ward case study. *BMJ Open* **11**:e047114. doi:10.1136/ bmjopen-2020-047114.

All study documents are presented in Appendix C, including the printable parts of the intervention toolkit.

6.2 Published paper

Open access Original research

BMJ Open

Developing a theory-informed complex intervention to improve nurse–patient therapeutic engagement employing Experience-based Co-design and the Behaviour Change Wheel: an acute mental health ward case study

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ABSTRACT

Objectives Our objectives were threefold: (1) describe a collaborative, theoretically driven approach to co-designing complex interventions; (2) demonstrate the implementation of this approach to share learning with others; and (3) develop a toolkit to enhance therapeutic engagement on acute mental health wards.

Design and participants We describe a theory-driven approach to co-designing an intervention by adapting and integrating Experience-based Co-design (EBCD) with the Behaviour Change Wheel (BCW). Our case study was informed by the results of a systematic integrative review and guided by this integrated approach. We undertook 80 hours of non-participant observations, and semistructured interviews with 14 service users (7 of which were filmed), 2 carers and 12 clinicians from the same acute ward. The facilitated intervention co-design process involved two feedback workshops, one joint co-design workshop and seven small co-design team meetings. Data analysis comprised the identification of touchpoints and use of the BCW and behaviour change technique taxonomy to inform intervention development.

Setting This study was conducted over 12 months at an acute mental health organisation in England.

Results The co-designed *Let's Talk* toolkit addressed four joint service user/clinician priorities for change: (1) improve communication with withdrawn people; (2) nurses to help service users help themselves; (3) nurses to feel confident when engaging with service users; (4) improving team relations and ward culture. Intervention functions included training, education, enablement, coercion and persuasion; 14 behaviour change techniques supported these functions. We detail how we implemented our integrated co-design-behaviour change approach with service users, carers and clinicians to develop a toolkit to improve nurse–patient therapeutic engagement.

Conclusions Our theory-driven approach enhanced both EBCD and the BCW. It introduces a robust theoretical approach to guide intervention development within the co-design process and sets out how to meaningfully involve service users and other stakeholders when designing and implementing complex interventions.

Strengths and limitations of this study

- To our knowledge, our study is the first to combine and implement a new theory-driven co-design-behaviour change process with service users, carers and clinicians in a mental health setting.
- Our intervention development process was highly collaborative, with service users, carers and clinicians working together in equal and active partnership.
- Our process provided a systematic and replicable system for reporting the behavioural mechanisms of action behind our complex intervention toolkit.
- Although our process was highly collaborative, it was conducted at just one National Health Service site, which represents a possible limitation.

BACKGROUND

Nurse–patient therapeutic engagement can broadly be described as the use of verbal and non-verbal interchange to improve a service user's mental health.[1 2] Lack of high-quality engagement on acute mental health wards is strongly associated with increased rates of self-harm, violence, aggression, absconding and poor perceptions of inpatient care.[3 4] Engagement may initiate and enhance the therapeutic relationship,[5] which arguably has the greatest impact on treatment outcomes, over and above the specific interventions provided.[6 7] However, nurses report high levels of acuity, reduced workforce, competing administrative duties and the nebulous nature of engagement as reasons for not engaging with service users.[8–10] These factors also have a negative impact on nurses' job satisfaction,[11] increasing the likelihood of burn-out and leaving the profession prematurely.

Reports from service users suggest that wards are experienced as devoid from warm, respectful therapeutic interactions.[12] Pharmacological treatments are prioritised over collaborative clinician–patient engagement, which leaves service users feeling stigmatised and alienated from their care team.[13 14] Despite a recognition of the importance of collaborative care planning by clinicians, service users were often not involved in this process and felt as if they had no say in the trajectory of their care.[15] Policymakers, researchers and patient advocacy groups globally have emphasised the importance of engagement in practice.[16–18] However, lack of quality engagement is a long-standing, complex problem[19 20] and few nursing interventions to improve engagement are reported in the literature.

One such intervention, predominantly implemented in the UK, is protected engagement time (PET). During PET, nurses devote a specified amount of time to regular engagement sessions with service users.[21 22] PET originates from the refocusing model, which was a comprehensive series of interventions to improve inpatient services and reduce work strain on staff.[23 24] The refocus model brought about improvements to the quality of care, staff sickness and costs, rates of absconding and self-harm.[23] Following this, PET was adopted as a stand-alone intervention by mainstream policy (eg, ref 25), which resulted in its top-down implementation in many mental health services across England. Subsequent evaluations on both adult and older adult mental health wards found that while PET attempts to address nurses' opportunities to engage, it does not account for wider considerations about what is done within the engagement sessions.[26–28] This may be because PET was intended to be used alongside other interventions, and its use as a stand-alone intervention stemmed from an atheoretical, common sense approach to implementation.

In response to PET's limitations, a Swedish study developed the Time to Talk (TT) intervention.[29] TT is a form of PET, theoretically informed by two studies of everyday life on acute wards[30 31] and the Tidal Model—a holistic model of nursing care that promotes the exploration of service users' own narratives.[32] In a qualitative evaluation of TT,[33] service users reported that clinicians were more engaged after TT was implemented; however, their quantitative evaluation found no improvement in the quality of engagement as measured through the Caring Professional Scale.[34] This mirrors evaluations of PET.[26 27] Although PET and TT address nurses' opportunities to engage, they may not compensate for wider deficiencies in service provision such as poor supervision, clinical skills and personal motivations,[26 28] and neither were collaboratively developed with input from service users, carers and clinicians.

To better understand and enhance nurse–patient engagement in practice we previously conducted a systematic integrative review to develop a conceptual model of engagement.[35] For high-quality engagement to occur, the model suggests that nurses must employ techniques that encompass five 'Principles of Engagement': (1) understand the person and their illness; (2) facilitate growth; (3) therapeutic use of self; (4) choose the right approach and; (5) emotional versus restrictive containment. The model drew on behaviour change theory[36] to show that engagement is broadly influenced by both the service users' and nurses' capability, opportunity and motivation to engage. To address the limitations of previous interventions, we propose a collaborative, theory-driven approach to co-designing a complex intervention to improve the amount and quality of engagement on acute mental health wards. To do so, we have drawn from our model of engagement described above and adapted and integrated two existing approaches: Experience-based Co-design (EBCD)[37 38] and the Behaviour Change Wheel (BCW).[36]

EBCD is a form of participatory action research which draws on user-centred design and user experience to improve healthcare services.[37] The structured EBCD process, detailed in a freely available online toolkit,[39] aims to meaningfully engage service users, carers and clinicians throughout a co-design process using observations, interviews and facilitated workshops. The BCW and accompanying behaviour change technique taxonomy version 1 (BCTTv1) has amalgamated 19 behaviour change theories to create a framework that guides intervention development.[36] It follows three phases: (1) understand the behaviour; (2) identify intervention options; and (3) identify intervention content. At its core, the model suggests that capability, opportunity and motivation interact to create behaviours (COM-B).[40] The Theoretical Domains Framework (TDF)[41] is aligned in the model to the COM-B components and both are linked to nine intervention functions. The BCTTv1 is a taxonomy of 93 behaviour change techniques (BCTs). These 93 BCTs can be matched to the intervention functions to identify suitable BCTs, which make up the active ingredients of an intervention.[42 43] Figure 1 maps the BCW phases, methods and tools to the phases, methods and tools of EBCD and provides a theory-driven basis for the co-design of behaviour change interventions.

Healthcare research and policy now recognise the importance of both co-designing interventions and using a robust theory to guide intervention development,[44 45] but to date very few studies report on how to co-design complex healthcare interventions using a theory-driven approach. Currently, there are no published studies that develop interventions using EBCD informed by the BCW. In response, we demonstrate the implementation of a theory-driven co-design-behaviour change process (figure 1) that was used to develop a complex intervention toolkit for promoting nurse–patient engagement on acute mental health wards.

We aim to:

- Describe a collaborative, theoretically driven approach to co-designing complex interventions.
- Demonstrate the implementation of this process to share learning with others.
- Develop a toolkit to enhance therapeutic engagement on acute mental health wards.

METHODS

Design

This case study was guided by the UK Medical Research Council complex intervention framework[46] and was theoretically driven by the content illustrated in figure 1. The co-design process is reported in accordance with guidance for reporting intervention development studies in health research[47] (online supplemental file 1). Participants gave written consent prior to being interviewed and again at the start of each co-design workshop. Posters that explained the purpose of the ward observations were displayed in common areas on the ward. Participation in observations was on an opt-out basis, to which nobody opted out.

Setting

The study was conducted with service users, carers and clinicians from one inner-London National Health Service (NHS) Foundation Trust in England, where the lead author had previously conducted exploratory work.[5] The intervention ward has 18 beds and treats adults[18–64] experiencing an acute phase of severe

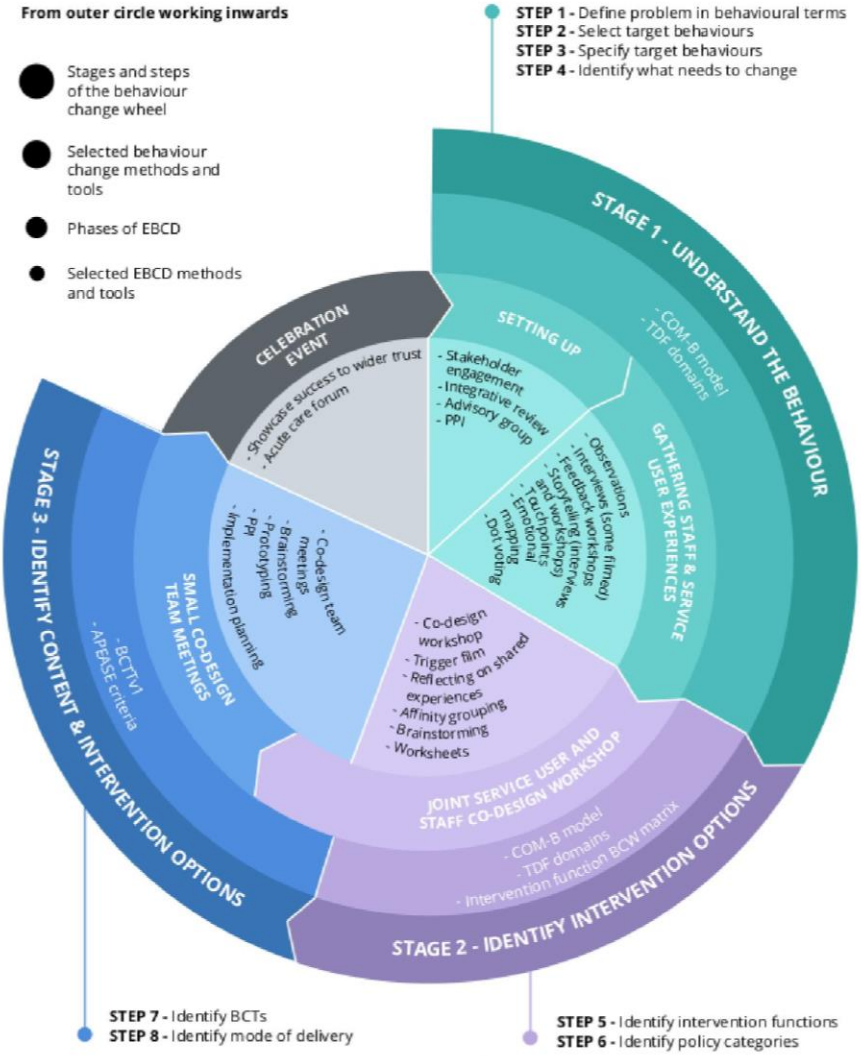

Figure 1 Integrated codesign-behaviour change model. APEASE, affordability, practicability, effectiveness/cost-effectiveness, acceptability, side effects/safety and equity; BCT, behaviour change technique; BCTTv1, behaviour change technique taxonomy version 1; BCW, behaviour change wheel; COM-B, capability, opportunity and motivation interact to create behaviours; EBCD, experience-based co-design; PPI, patient and public involvement; TDF, theoretical domains framework.

mental illness. The ward is laid out along a corridor, with the nursing station and reception area at one end of the ward, the service user bedrooms running along both sides of the corridor and the service user lounge and day area at the opposite end of the ward to the nursing station. Service users are predominantly detained under the Mental Health Act.[48] The ward consists of a multidisciplinary team of 20 clinicians, including 8 registered mental health nurses (RMNs), 7 healthcare assistants (HCAs), a peer support worker, an activities coordinator, an occupational therapist, a psychologist and a consultant psychiatrist. The nursing team works shift patterns from 07:30 to 21:30 or from 21:00 to 08:00 and all RMNs and HCAs are involved in direct patient care including care planning, one-to-one interactions and close and hourly observations. The RMNs are responsible for medication rounds. The ward provides timetabled daily activities run by the activities coordinator, and service users attend weekly ward rounds led by the consultant psychiatrist and an RMN. This project began in April 2018 and complemented other organisational improvement work to reimplement PET.

Participants

The co-design team was recruited through:

- A convenience sample of service users and carers via: (1) face-to-face contact and posters at community mental health teams (CMHTs) and (2) face-to-face contact and email at service user advocacy groups connected to the participating NHS organisation.
- A whole population sample of clinicians on the participating ward were invited to take part via presentations, posters, email and face-to-face meetings.

SM screened all potential participants, specifically looking for those who had, or had cared for somebody who had at least one inpatient admission at the organisation but was not currently experiencing a relapse. Eligible individuals were then guided through a written informed consent procedure. Figure 2 shows the recruitment process by type of participant and workshop attendance through the EBCD process. A total of 35 members were recruited to the co-design team including 15 service users, 2 carers, 10 RMNs,

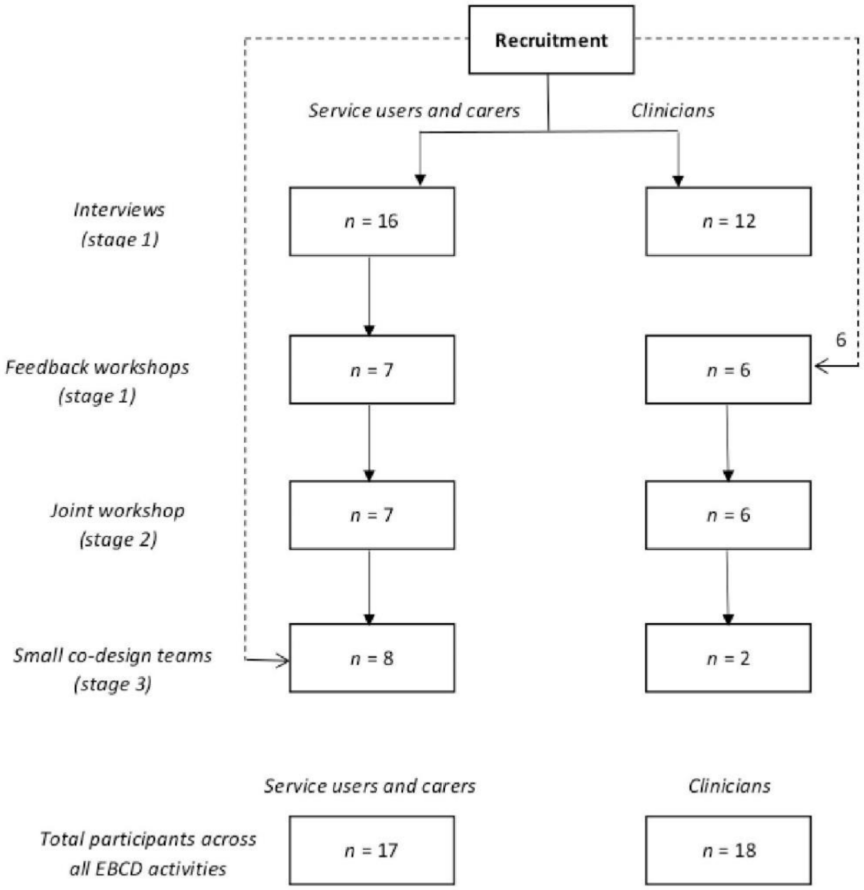

Figure 2 Recruitment process by type of participant and workshop attendance. EBCD, experience-based codesign.

4 HCAs, 3 psychological therapy clinicians and 1 student nurse. Just over half of the codesign team were female (54%) and just under half were from a black, Asian, and minority ethnic background (49%). Participants' ages ranged from 18 to 64 years. Service users had a variety of mental illnesses, including psychotic disorders such as schizophrenia and bipolar affective disorder (71%), personality disorder (7%), anxiety (7%) and eating disorder (7%).

Data collection and analysis

Data collection methods and processes were aligned to the EBCD phases and BCW stages contained in figure 1 and informed by the aforementioned integrative review[35] these included non-participant observations and semi-structured interviews to gather service user, carer and clinician experiences, and feedback and co-design workshops to facilitate development of the engagement toolkit.

Non-participant observations and semistructured interviews

SM (a mental health nurse, previously unknown to the study participants and trained in the application of the EBCD and BCW approach) conducted 80 hours of non-participant observations on the acute ward between the hours of 07:30 and 15:00 or 13:30 and 21:30, Monday through Sunday. Observations were performed in 15 minute intervals, beginning with the first nurse encountered and continued until all nursing staff had been observed. Field notes were guided by Tyson and colleagues[49] and documented patterns of nurse–patient behaviour, nurse–patient dynamics, tone of voice, body language, potential influences on engagement and general ward atmosphere.

SM also interviewed 14 service users, 2 carers and 12 clinicians on a one-to-one basis at a location of their choice including university premises, offices at CMHTs or by telephone. All interviews were audio recorded and seven service user interviews were filmed in keeping with the EBCD approach. Interviews lasted between 30 and 80 min. A topic guide was followed, informed by our review,[35] the non-participant observations and the COM-B/TDF domains.[41 42] Interviews addressed participants' experiences of engagement, barriers and facilitators to engagement, and clarified assumptions made from the observations.

Full details of the non-participant observations and semistructured interviews, including the inductive analysis of data to identify 'touchpoints' (emotionally significant points) of importance to the co-design team, are reported in a separate paper.[50] A secondary deductive analysis of interview data, which is reported in this paper, was also undertaken to identify barriers to engagement. Deductive codes were based on the COM-B and TDF components of the BCW which were used as an a priori framework to analyse and thematically organise interview data. SM independently coded and themed the data using this framework. Extracts from both the filmed and audio-recorded interviews were also edited into a trigger film that was used to stimulate discussion at the feedback and co-design workshops.

Feedback and codesign workshops

Touchpoints and themes were shared at separate service user/carer and clinician feedback workshops and at a joint co-design team workshop. This ensured validity of the analysis, facilitated the joint selection of target behaviours based on the touchpoints and allowed intervention options and content to be agreed. Seven co-design team meetings were also established to work on specific priority areas. Consensus was reached through facilitated discussions and consensus building exercises including emotional mapping[37] and affinity grouping.[51]

Input was also sought throughout the co-design process from two mental health patient and public involvement (PPI) groups based at the participating organisation. An advisory group consisted of a service user representative, one clinician and clinical academic experts in (A) the EBCD methodology and (B) therapeutic engagement, respectively. The service user representative cofacilitated the feedback workshops with SM who also facilitated the joint co-design and co-design team workshops with the assistance of another nurse researcher trained in the BCW approach. Three co-design team members wrote reflective accounts of their experiences of the co-design process and are coauthors of this paper.

Patient and public involvement

Service users and carers were at the heart of this research, being involved from conception, through execution and dissemination of this work.

RESULTS

Here we present our theory-driven approach to co-designing the *Let's Talk* complex intervention toolkit. Our findings are organised under the three stages (and eight constituent steps) of the BCW guide, as shown in figure 1.

Stage 1: understanding the behaviours

Step 1: define the problem in behavioural terms

Through previous research,[5] our integrative review[35] and initial discussions with our PPI, advisory groups and the clinical service lead, modern matron and divisional medical director at the NHS organisation, the behavioural problem was defined as the absence of high-quality nurse–patient therapeutic engagement on acute mental health wards, that is, not using the Principles of Engagement identified in our review.

Step 2: select target behaviour(s)

In keeping with the EBCD methodology, it was important to understand how service users and staff typically experienced engagement prior to the identification of relevant areas for behavioural change. Through observations and semistructured interviews, the research team identified 28 touchpoints. Some examples of touchpoints were (1) I was left on my own and ignored; (2) my care

Table 1 Service user and clinician priorities for change

Service user priorities	Clinician priorities
(1) Nurse–patient communication needs to be improved.	(1) Improve the way we communicate with service users.
(2) Treat me like a human being.	(2) Improve the way that leave is communicated.
(3) Forgive and forget.	(3) Improve culture around response.
(4) Help me help myself.	(4) Improve the way messages are handed over within the team.

was robotic; and (3) as a nursing team we need to create better bonds with service users (full results found in ref 50).

To ensure credibility, the touchpoints were discussed during two facilitated feedback workshops—one for service users and one for clinicians. In an emotional mapping exercise, participants were encouraged to identify improvement priorities based on their touchpoints and assign associated behaviours (see online supplemental file 2 for breakdown of touchpoints into improvement priorities and associated behaviours). Participants then ranked their improvement priorities in a dot voting exercise and chose four priorities to take forward to the joint workshop (table 1). The service user and clinician priorities were as follows.

At the joint workshop, facilitated discussion encouraged participants to consider the potential impact, likelihood of change, spillover effect and ease of measurement of all the improvement priorities and associated behaviours. An affinity grouping exercise was conducted and through this, four shared improvement priorities were identified and agreed:

1. Improve communication with withdrawn people.
2. Nurses to help service users help themselves.
3. Increasing nurses' confidence when interacting with service users.
4. Improve team relations and ward culture.

Step 3: specify target behaviour(s)

EBCD focuses on identifying participants' improvement priorities as a way of bringing about change that is meaningful to service users, carers and clinicians.[39] We used the BCW to examine each of the four joint improvement priorities. At the joint workshop, the co-design team formed into smaller groups with equal numbers of service users and clinicians. Each group completed a written exercise where they examined the joint priorities and associated behaviours in terms of who needs to perform the behaviour, what the person needs to do differently to achieve change and when, where and with whom they will do it (table 2). (See online supplemental file 3 for example of written exercise.)

Step 4: identify what needs to change

From our review and semistructured interviews with service users, carers and clinicians, the research team identified 26 barriers to engagement and mapped them to the COM-B/TDF domains. The barriers were discussed with participants at the feedback workshops to ensure credibility. At the joint workshop participants matched the barriers to their four joint improvement priorities. The barriers related to each COM-B component are discussed below, with the corresponding TDF domains presented in parentheses.

Table 2 Specification of behaviours for joint improvement priorities

Joint improvement priorities	Behaviour specification			
	What	Who	Where	When/with whom
Improve communication with withdrawn people.	(1) Recognise who needs to engage; (2) Respond in a timely and appropriate manner when engaging.	Nurses	Acute ward	When service users require engagement.
Nurses to help service users help themselves.	(1) Give practical advice; (2) explain the purpose of admission; (3) understand the person; (4) facilitate growth; (5) give discharge support.	Nurses	Acute ward	During service user's admission to an acute ward.
Nurses must feel confident when engaging with service users.	(1) Have effective therapeutic conversations; (2) Articulate practical procedures in an understandable way; (3)Reduce anxiety when engaging.	Nurses	Acute ward	When engaging with a service user.
Improving team relations and ward culture.	(1) Ensure nursing team take care of each other; (2) understand nurse–patient dynamics on the ward; (3) ensure a consistent response to service users.	Nursing team	Acute ward	Throughout their shift with the nursing team and with service users.

Capability

Participants agreed that nurses often had limited knowledge and inadequate training in therapeutic engagement techniques (skills and knowledge):

> Although I've been doing this for almost five years it's like sometimes with certain patients you just don't know what to say…I wish there could be some training to understand that stuff.—RMN6

Nurses also felt that the very nature of having a mental health problem could make it difficult to engage, and while service users agreed that their mental illness and medication effects could negatively impact engagement (memory/attention/decision process), they were able to describe helpful engagement techniques that nurses could employ, even with the most acutely unwell people. This further highlighted the need to improve nurses' engagement skills:

> Sometimes you have a lot more patients who are unwell or sometimes they're less unwell, so engagement fluctuates week on week from that point of view.—RMN2

Opportunity

It was felt that there needed to be a cultural shift on the ward and within the organisation so that nurse–patient engagement activities were supported and valued in the same way as other tasks such as hourly observations or administrative duties (social influences):

> It was a numbers game, everyone's taking handover, another one's doing checks, some are on break…in an ideal world allocate friendly HCAs just to sit with patients.—SU7

There was unanimous agreement that lack of resources negatively impacted on nurses' ability to engage therapeutically:

> The problem for me lies on the number of staff, that is not enough…—C1

This created an untherapeutic ward environment where '*professionals would run around like mad rabbits not giving any attention to the patients*'.—SU2 (environmental contexts and resources)

Motivation

Nurses felt that they could not always trust all members of their team to carry out the job in the right way. This created a feeling of helplessness for some nurses, which deterred them from engaging therapeutically (beliefs about capabilities):

> I became very aware that when there is an incident, I'm left on my own…I stopped trusting the team…I couldn't rely, therefore I needed to take a step back from the patients.—HCA2

Service users were also deterred from approaching nurses for engagement because they felt nurses often did not understand their problems or would punish them if they asked for therapeutic engagement too often (beliefs about consequences):

> I kept myself to myself because even when I asked for simplest of things I was made to wait for ages so I would get frustrated, but if I showed frustration no doubt that would be on my notes and I would get set back.—SU4

As well as issues of trust, the ward staff felt as though their team were transient, with many long-standing nurses leaving to work elsewhere. This led to a lack of shared responsibility. Therapeutic engagement could easily '*fall through the cracks*'—HCA1, and when poor-quality engagement was witnessed, it was rarely followed up by a senior member of the team. This made some nurses feel they could not be bothered to engage:

> I mean to put it blunt; I know it sounds really bad…I can't be bothered.—RMN5

There was also a blurring of professional roles, where although nurses knew they should engage, they left it to other professionals such as the occupational therapist or activities coordinator:

> I can completely understand why nurses want separate roles because they would say you don't do our job so why should we do yours, but I do take people out on escorts and I do blur the boundaries there.—PT1.

When asked to give examples of nurse–patient engagement, many service users spoke about engagement with professionals other than nurses. This shows both the lack of engagement from nurses and the difficulty service users have in delineating between the nursing role and the role of other health professionals (social/professional identity).

There was a general sense from nurses that therapeutic engagement '*didn't always help people*'—RMN8 (optimism). This led some nurses to feel anxious about engaging therapeutically, particularly when they felt they did not have the required skills. When this was coupled with feelings of frustration at the perceived lack of managerial support, nurses reported feeling drained, burnt out and demotivated (emotions):

> One of the biggest problems is the management style which on paper, yes, it seems to be doing everything right, but in practice they have a very poor relationship with their staff and that does impact on performance…I just feel like no one cares about you, so why give up your time?—RMN3

Stage 2: identify intervention options

Step 5: identify intervention functions

PPI and advisory group meetings highlighted that some of the terminology used to describe intervention functions

Table 3 Practical examples of behaviour change wheel functions given to co-design team

Intervention function	Practical example given to co-design team
Education (increase knowledge or understanding)	Service users meet with nursing staff once they have recovered and describe their experiences while on the ward.*
Persuasion (using communication to induce positive or negative feelings or stimulate action)	Have a poster on the ward that shows people happily engaging, with a message that reminds clinicians that engagement is part of their job, it is not 'slacking off'.*
Incentivisation (create an expectation of reward)	Offer a prize for the ward that has the best patient feedback regarding interactions.†
Coercion (create an expectation of punishment or cost)	At discharge, ask service users to provide feedback to the ward about the quality of interactions provided and hold staff accountable for this.*
Training (imparting skills)	Training programme that enables nurses to role-play with service users, so they gain skills on how to deal with service users' problems.*
Restriction (using rules to reduce/increase the opportunity to engage in target behaviour)	Nurses stop paperwork/admin during mealtimes and sit with service users and have a cup of tea or some food.*
Environmental restructuring (changing physical or social context)	Give service users cards that display different emotions and if they want to talk they can put the card on their door so nurses know to approach them.*
Modelling (providing an example for people to aspire to or imitate)	Have a therapeutic engagement champion who promotes engagement and helps nurses to carry out group activities with patients.*
Enablement (increasing means or reducing barriers to increase capability beyond environmental restructuring)	Have a ward diary for interactions that a member of staff is responsible for each shift.*

*Example that came from participant interviews.
†Example developed from behaviour change wheel (BCW) guide.

would not be suitable to use with our participants. Words such as 'coercion' can have negative connotations to mental health service users. Instead, practical examples that captured the essence of each intervention function were provided to participants at the joint co-design workshop. In a written exercise they were encouraged to use these examples to think about intervention functions that could address their four joint improvement priorities. Where possible we modelled these examples on illustrations from interviews with service users, carers and clinicians. Where this was not possible, we developed examples from the BCW book[36] (table 3).

Participants identified five intervention functions that were relevant to bringing about the desired change. These were (1) training; (2) education; (3) enablement; (4) coercion; and (5) persuasion. Through discussions with senior management, the research team also identified restriction as a relevant function. The links between the COM-B/TDF domains and the intervention functions are shown in table 4.

Step 6: identify policy categories

The BCW includes policy categories which may help to support the delivery of an intervention. Through discussion with senior management, the research team identified communication/marketing, guidelines and social planning as potentially relevant to facilitating our intervention. As such, the Principles of Engagement described in the introduction of this paper were included within Trust policy on therapeutic engagement and observations, and these principles will be directly linked with other components of the intervention, such as a training film described below.

Stage 3: identifying intervention content and implementation options

Steps 7 and 8: identify BCTs and mode of delivery

Rather than provide participants with a long list of BCTs, the written exercise at the joint workshop encouraged them to design intervention strategies they thought relevant to each of the four priorities and its influencing factors. The research team retrospectively assigned BCTs to the participants' examples and selected further BCTs and intervention strategies not identified during the joint workshop. These were the basis for the development of the first intervention prototype.

The prototype was further refined through an iterative process of email exchanges, telephone calls, a PPI meeting, seven small co-design team meetings and finally presentation of the work at an organisation-wide acute care forum. As per the BCW guide,[36] the affordability, practicability, effectiveness/cost-effectiveness, acceptability, side effects/safety and equity (APEASE) criteria were used in an adapted form (see online supplemental file 4) to stimulate discussion and ideas. These criteria ultimately informed the choice of intervention strategies for each improvement priority.

Fourteen BCTs were considered relevant to the *Let's Talk* intervention toolkit. Table 4 shows the link between each phase of the behaviour change intervention design process, the 14 BCTs and the intervention strategies and

Table 4 The behaviour change intervention co-design process and components of the resulting *Let's Talk* intervention toolkit

Behavioural analysis using COM-B/TDF (step 4)		Intervention functions (step 5)	BCTs (step 7)	Intervention strategies/mode of delivery (step 8)
Priority 1: Improve communication with withdrawn people.				
Capability	**Knowledge:** ► Nurses think service users who stay in their rooms do not want to interact.	Education	Prompts/cues	**Prompt/cues:** *Sliding door signs and accompanying supportive informational message on inside of service users' door*—acts as a cue for nurses to easily identify service users who wanted to engage despite isolating in their bedrooms. Acts as a cue for service users to encourage them to ask for engagement if needed.
	Memory, attention, decision: ► Service users' illness can make it difficult to engage/lose touch with reality. ► Medications can make it difficult to interact/retain information.	Education	Prompts/cues	**Prompt/cues:** As above.
		N/A	N/A	Addressed in priority 3.
Opportunity	**Social influences:** ► Nurses must do observations within a set period, so focus on getting the task done rather than speaking to the service users.	Restriction Enablement	**Enablement:** Action planning	**Action planning**: *Hourly observation record*—each hour allocated observation nurse records which service user's door sign signals an engagement request and whether that request has been met. If request not met immediately, the observation sheet prompts nurse to plan with the service user about when engagement will happen.
	Environmental context and resources: ► Nurses feel they do not have the time to interact/are allocated too many patients to interact with all in one shift. ► Nurses are busy so it is easy to miss service users who are quiet.	Restriction Enablement Environmental restructuring	**Restriction:** Currently no BCTs for this function **Enablement:** Restructuring the social environment **Environmental restructuring:** Prompts/cues	**Restrictions and restructuring the social environment:** *Protected engagement time*—requiring nurses to stop duties that do not involve engagement for 1 hour each day and use that hour to engage. This supports nurses to use the *Let's Talk* toolkit with service users. **Prompts and cues:** *Sliding door signs and accompanying supportive informational message on inside of service users' door*—as above.

Continued

Table 4 Continued

Behavioural analysis using COM-B/TDF (step 4)		Intervention functions (step 5)	BCTs (step 7)	Intervention strategies/mode of delivery (step 8)
Motivation	**Beliefs about capabilities:** ▶ Nurses feel helpless. ▶ Service users feel the nurses will not understand them if they talk to them.	N/A	N/A	Addressed in priority 2 and priority 4.
		N/A	N/A	Intervention did not address this directly as it was thought that if nurses' behaviour changes and engagement is improved, this barrier will be mitigated.
	Beliefs about consequences: ▶ Nurses cannot be bothered to interact as they feel other tasks take precedence over interactions. ▶ Service users are fearful of initiating an interaction.	Coercion Education Education	**Coercion:** Discrepancy between current behaviour and goal **Education:** Feedback on behaviour **Education:** Prompts/cues	**Discrepancy between current behaviour and goal, feedback on behaviour**: *Hourly observation record*—nursing team set goal of meeting all engagement requests each day. Allocated observation nurse records levels of engagement each hour. Levels of 'missed engagement' fed back to nursing team via monthly audit and compared with set goal daily during nursing handover. **Prompt/cues:** *Supportive informational message inside service users' door*—acts as a cue for service users to encourage them to ask for engagement if needed.
	Social/professional identity: ▶ Transient team so no sense of shared responsibility.	Education	Self-monitoring of behaviour	**Self-monitoring of behaviour:** *Hourly observation record*—nurse in charge to check and record unmet engagement requests and hand over to next nursing team. Enables nursing team to monitor behaviour and create accountability within the team.
	Emotion: ▶ Nurses feel anxious about approaching a person who stays in their room.	Enablement	**Enablement:** Adding objects to the environment	**Enablement:** *Adding objects to the environment: sliding door signs*—shows nurses that people who are in their rooms want to engage.
Priority 2: Nurses to help service users help themselves.				
Capability	**Skills:** ▶ Nurses say they are unsure what to say to service users when they are unwell or have big problems.	Training	Instruction on how to perform the behaviour	**Instruction on how to perform the behaviour**: *My Conversation Companion workbook*—provides nurses with short, guided exercises that can be done with service users. This helps structure therapeutic conversations. This is supported further by priority 3.
Opportunity	**Environmental context and resources:** ▶ The overall ward environment is not set up for quality interactions with service users. ▶ Nurses feel they do not have the time for quality interactions/allocated too many patients to interact with all on one shift.	Restriction Enablement	**Restriction and enablement:** Restructuring the social environment	**Restrictions and restructuring the social environment:** *Protected engagement time*—requiring nurses to stop duties that do not involve engagement for 1 hour each day and use that hour to engage. This will support nurses to use the Conversation Companion with service users.

Continued

Table 4 Continued

Behavioural analysis using COM-B/TDF (step 4)		Intervention functions (step 5)	BCTs (step 7)	Intervention strategies/mode of delivery (step 8)
Motivation	**Beliefs about capabilities:** ▶ Nurses feel helpless.	Education	**Education:** Prompts/cues	**Prompts and cues:** *My Conversation Companion workbook*—prompts nurses' therapeutic conversations by providing short, guided exercises to complete with service users, for example, working through service users' stressors or helping a service user identify their feelings from an emotions table.
	Social/professional identity: ▶ Blurring of professional roles, for example, occupational therapists and activities coordinators do activities groups, not nurses	Education	**Education:** Reattribution	**Reattribution**: *My Conversation Companion workbook*—encourages nurses to engage with service users and reattribute this work as being part of their role.
	Optimism: ▶ Nurses feel that they make an effort with service users, but it is not remembered or appreciated. ▶ Nurses feel that engaging is not always an effective intervention for some service users.	N/A	N/A	Addressed in priority 3.
		N/A	N/A	Addressed in priority 3.
	Emotion: ▶ Nurses feel anxious about approaching a person when they are not sure what to say to them.	Enablement	**Enablement:** Adding objects to the environment	**Adding objects to the environment:** *My Conversation Companion workbook*—provided to the ward to facilitate engagement between service users and nurses to help structure and guide therapeutic conversation.
Priority 3: Nurses must feel confident when engaging with service users.				
Capability	**Skills:** ▶ Nurses do not have the skills or knowledge to deal with service users' problems. ▶ Nurses say they are unsure what to say to service users when they are unwell or have big problems.	Training Education	**Training:** Instruction on how to perform the behaviour, feedback on the behaviour, feedback on the outcome of the behaviour **Education:** Information about health consequences	**Instruction on how to perform the behaviour:** *Training film shown to nurses*—our review identified five principles for engagement, these are used in the film to educate nurses on how therapeutic engagement should be carried out in practice. Each principle is illustrated through a video clip from the participant interviews giving personal examples of the techniques nurses use with them to fulfil each principle of engagement. **Feedback on behaviour and outcomes of behaviour:** *Training film*—the codesign team discussed the outcomes of both the lack of engagement and when good engagement occurred, for example, '*I think some nurses just see it as a nine to five…they just want to get home and have dinner, you know? But considering how sick I was, that lack of interaction made me feel very frightened.'*—SU8 **Information about health consequences:** *Training film*—service users and carers discuss the mental health consequences of lack of engagement and good engagement, for example, '*I felt like I wasn't being looked after by the nurses so I had to do silly things like I overdosed on tablets, I kept absconding…there were a lot of problems associated with my illness the nurses didn't recognise.'*—SU2
	Memory, attention, decision: ▶ Service users' illness can make it difficult to engage/lose touch with reality. ▶ Medications can make it difficult to interact/retain information.	Training	**Training:** Instruction on how to perform the behaviour	**Instruction on how to perform the behaviour**: *Training film*—service users and carers discuss how nurses can engage despite illness and medication side effects, for example, '*If you just learn to listen, that's quite often all somebody wants, but what nurses are trying to do is fix it and it doesn't need fixing, it just needs to be heard by the staff…they need to hear what that patient is going through and why they want to do what they want to do. Whether that's self-harm, suicide, a delusional belief, whatever it is they need to understand that's a mental disorder that needs the help and support from the nurses.'*—SU11
Opportunity	**Environmental context and resources:** ▶ Nurses feel they do not have the time to interact/are allocated too many patients to interact with all in one shift.	Training	**Training:** Instruction on how to perform the behaviour	**Instruction on how to perform the behaviour**: *Training film*—service users and carers discuss how engagement does not need to be a long, drawn-out process, for example, '*That eye contact means everything. When the nurses say that "Oh, they want us to sit there for an hour" it's not really true…a nurse could really represent something for a patient, that one word, that one eye contact just to give them reassurance that it's okay.'—C1*

Continued

Table 4 Continued

Behavioural analysis using COM-B/TDF (step 4)		Intervention functions (step 5)	BCTs (step 7)	Intervention strategies/mode of delivery (step 8)
Motivation	**Optimism:** ▶ Nurses feel that they make an effort with service users, but it is not remembered or appreciated. ▶ Nurses feel that engaging is not always an effective intervention for some service users.	Education Persuasion	**Education:** Feedback on behaviour, feedback on outcomes of the behaviour **Persuasion:** Credible source	**Feedback on behaviour and outcomes of behaviour:** *Training film*—service users and carers discuss moments they appreciated engagement with a nurse, for example, '*I was very against medication…but one student nurse explained it to me…her interaction was very positive, very one-to-one, reassuring, so I took the medication orally and wasn't depo-injected which was a positive thing.*'—SU3 **Credible source**: *Training film*—filmed clips of service users are used as a credible source to help persuade nurses that service users wanted to engage, and that engagement is useful.
	Emotion: ▶ Nurses feel anxious about approaching a person who stays in their room and/or somebody they are not sure what to say to.	Persuasion	Credible source	As described above.
Priority 4: Improve team relations and ward culture.				
Capability	**Memory, attention, decision:** ▶ Nurses say they are tired.	Enablement	**Enablement:** Social support (unspecified and practical), restructuring the social environment	**Social support**: *Check-ins at handover*—small changes will be made to nurses' daily routines, for example, during handover, time will be made to check in with the nursing team and offer additional support to any team member who needs it that day. **Restructuring the social environment:** *Protected engagement time*—as described in priority 1 and priority 2.
Opportunity	**Social influences:** ▶ The ward culture is not open to change. ▶ The overall ward environment is untherapeutic.	Enablement Restriction Enablement	**Enablement:** Social support (unspecified and practical) **Enablement and restriction:** Social support (unspecified and practical), restructuring the social environment	**Social support**: *Reflective practice workshops*—the ward will attend quarterly facilitated workshops that bring clinicians and service users together to discuss, reflect and improve practice. **Restructuring the social environment:** *Protected engagement time*—as described in priority 1 and priority 2. **Social support**: *Compassion Champion*—while not part of the current *Let's Talk* toolkit, the codesign team would like to do ongoing work around implementing a Compassion Champion who advocates for both staff and service user well-being within the organisation.
Motivation	**Beliefs about capabilities:** ▶ Nurses feel helpless. ▶ Nurses do not trust everybody on their team to do the job the right way.	Enablement	**Enablement:** Social support (unspecified and practical)	**Social support**: *Check-ins at handover, reflective practice workshops and Compassion Champion*—as described above.
	Social/professional identity: ▶ Transient team so no sense of shared responsibility.	Enablement	**Enablement:** Social support (unspecified and practical)	**Social support**: *Check-ins at handover, reflective practice workshops and Compassion Champion*—as described above.
	Emotion: ▶ Nurses feel frustrated at the lack of managerial support. ▶ Nurses feel burnt out.	N/A Enablement	N/A **Enablement:** Social support (unspecified and practical), restructuring the social environment	Intervention did not address this directly as it was thought that by implementing measures such as PET, check-ins at handover, reflective practice workshops and a Compassion Champion, nurses would feel supported. **Social support**: *Check-ins at handover*—as described above. **Restructuring the social environment:** *Protected engagement time*—as described in priority 1 and priority 2.

BCT, behaviour change technique; COM-B, capability, opportunity and motivation interact to create behaviours; N/A, not applicable; PET, protected engagement time; TDF, theoretical domains framework.

modes of delivery which resulted from the co-design process.

The *Let's Talk* toolkit consisted of four main components, linked to the co-design team's four joint improvement priorities:

1. A 30 minute training film for nurses, delivered by service users and carers to be shown to nurses at the start of the intervention. Service users and carers discuss good and bad engagement techniques and personal accounts of their experiences of engagement while an inpatient, structured by our model of engagement.
2. An illustrated workbook called *My Conversation Companion* which includes guided exercises that nurses and service users can do together to help structure therapeutic conversations.
3. Signs attached to the outside of service users' bedroom doors to enable them to indicate, with a sliding panel, whether they would like engagement time or not. The signs are linked to the hourly nursing observation record, where each hour nurses will be required to record if a service user has requested engagement and if that request has been fulfilled. 'Missed engagement' will be handed over at each nursing shift with the expectation that it is fulfilled that day. Observation records will be audited each month and feedback given to the nursing team. Additionally, an illustrated sign on the inside of service users' doors will encourage service users to use the signs if they want to engage.
4. Changes to nurses' daily routines, for example, during handover, time will be made to check in with the nursing team and offer additional support to any team member that needs it that day. Additionally, quarterly facilitated workshops will bring clinicians and service users together to discuss, reflect and improve practice.

While conducting this work, the organisation was simultaneously discussing the potential addition of one extra staff member per shift. Our co-design team felt this would be beneficial to improving therapeutic engagement; however, a decision on this is yet to be made. Through discussions with the chief nurse, assistant director of nursing and divisional medical director and presentation of the work at an acute care forum it was agreed that the *Let's Talk* intervention would support the relaunched implementation of PET within the organisation. Discussion with participants revealed that they supported this and considered some form of PET essential to support nurses to use *Let's Talk* in practice. See online supplemental files 5 and 6 for the toolkit.

DISCUSSION

The delivery of high-quality nurse–patient therapeutic engagement is a complex issue that requires input from service users, carers, clinicians and researchers alike. Interventions to improve engagement must be multifaceted and encompass service users, carers and clinicians' capabilities, opportunities and motivations to engage. We used the methodical and evidence-based framework of the BCW to guide intervention development within a co-design process. This enhanced the process by supporting its 'intrinsically desirable qualities'[52] with a robust theoretical underpinning that facilitated a full analysis of existing barriers and behaviours among its principal stakeholders. Although Larkin and colleagues[53] suggest that it may be unrealistic to expect co-design participants to generate solutions to long-standing problems within a short space of time, supporting participants' ideas with a systematic and methodical theory of behaviour change may help mitigate that limitation.

Recent literature encourages a systematic, comprehensive and transparent approach to intervention development.[40] However, many behaviour change interventions are poorly defined and do not use consistent language to describe their mechanisms of action[54 55] making it difficult to pinpoint what did and did not work, which also reduces the ability to compare such interventions.[41] The BCW enabled us to identify, understand and describe the mechanisms of action behind *Let's Talk* which is likely to both improve its effectiveness[56] and enable us to review and refine intervention targets after preliminary testing. It also emphasised the importance of addressing nurses' capability, opportunity and motivation to engage. Previous interventions such as PET focus predominantly on the opportunities nurses have to engage, but do not consider whether a nurse may be capable or motivated to engage. This may explain why evaluations of PET have not shown improvements in the quality of engagement.[57] To our knowledge, this is the first intervention aimed at improving engagement to be developed and presented in this comprehensive, systematic and transparent manner.

Although systematic, the BCW approach may be considered somewhat prescriptive. This can clash with the underlying principles of co-production and co-design, which demand democratic, innovative and creative techniques.[58 59] The concept of co-production in mental health was not commonplace even 5 years ago.[60] Traditionally, professional knowledge had a higher status than service users' lived experiential knowledge.[61 62] Despite some notable exceptions (eg, ref 63 64), service user participation in research was, and often still is, tokenistic, with participants having little influence over defining the problems or required changes.[62 65] It was essential that our process acknowledged, explored and addressed these power differentials so as not to reinforce these entrenched ideals.

Academic language and terminology can preserve power differentials and compromise user and clinician participation.[66 67] People who suffer from mental health problems experience effects that can negatively impact cognition and concentration, often exacerbated by medications.[68] The use of overly technical language may disproportionally affect people from this group and may lead to exclusion and disempowerment,[69] which mirror some of the alienating experiences faced while an inpatient on acute wards (eg, ref 70). While the COM-B model uses relatively simple terminology,[40] the language used to describe the intervention functions was particularly problematic. Intervention functions such as 'coercion' and 'restriction' may have triggered difficult emotions for some of our participants. These words describe negative ward experiences, for example, when clinicians coerce service users into taking medication,[71] or when liberties are restricted due to treatment under the Mental Health Act 1983.[48] This was also true of the clinicians who participated in our study. Suggesting that they lacked 'skills' or 'knowledge' was likely to alienate them from the process and make them feel devalued.

To ensure fidelity to the underlying principles of co-design we therefore tailored the BCW approach to the needs of the co-design team. The research team found that providing practical examples of each intervention function, using language from the service users, carers and clinicians' interviews, was a suitable way of adhering to the principles of co-design and using evidence-based theory in a non-alienating, confirmatory way. Although APEASE criteria were not considered to contain triggering terminology, some of the language was overly technical which also risked alienating co-design team members. The research team therefore translated the APEASE criteria into more accessible language. Furthermore, the co-design team were encouraged to design their own intervention content based on the behavioural analysis. The research team retrospectively assigned BCTs and confirmed these with the co-design team. This adhered to the underlying principles of co-design by foregrounding service user experience (rather than privileging academic knowledge over experiential knowledge), while also creating an intervention that could be clearly and methodically described through evidence-based theory and language.

Reflective accounts from three of our co-design team support the steps taken by the research team to ensure an inclusive, participatory process. While the potential for experiential reflections to trigger difficult emotions was anticipated, team members' expressed anxieties were soon '*quashed*' by a '*safe and secure*' environment in which members '*never felt pressured or judged*'. This allowed the service users, carers and clinicians '*to support each other on an equal basis and share a common goal*'. The opportunity to share personal experiences emerged as an important dynamic across the three reflective accounts. It was variously described as '*a privilege*', and an '*incredibly moving*' and '*powerful*' experience that allowed their expert knowledge to be used '*to implement new models of care and improve quality standards*' that '*would make a real difference*'. Consequently, these co-design team members described an '*enjoyable*' and '*rewarding*' process that engendered feelings of pride and empowerment. One member referred to it as a '*life changing*' event that promoted self- esteem and self-awareness, and another reported the development of reflective skills. Notable also was the wider outreach and consultation that members undertook through liaison with professional colleagues, service users and carers in various institutional and community arenas, which mirrored their experience of the co-design process. This allowed stakeholders to express any concerns, ask questions and provide feedback. In turn, this led to '*product refinements to make the workbook more accessible and easier to read*'. As well as personal impact, these team members described interpersonal benefits including '*feeling (more) engaged with mental health professionals*' and managing to '*engage in some really good work*' with patients. They were also optimistic about the likely impact of this work moving forward. They sensed that service users and clinicians were '*inspired*' by their work and believed the workbook would have '*a ripple effect…and help create a cultural change within the organisation*'. Each of the reflective accounts is provided in full in online supplemental file 7.

Beresford[72] argues that front-line clinicians can also be a marginalised group whose voices are often excluded. It is also vital to consider the needs of the service provider while embarking on participatory work.[73] We implemented several facilitative measures such as providing backfill money so clinicians could attend the feedback and joint workshops and offered flexibility with participation in the small co-design teamwork, for example, emailing instead of face-to-face meetings and piggybacking staff meetings. However, enabling clinicians to participate equally was challenging. Unfortunately, organisational structures such as shift patterns and staffing levels impacted on clinicians' ability to fully participate. Regular staff meetings or reflective practice groups were also not in place. When given the opportunity to participate, clinicians were motivated, and meaningful participation was possible during the feedback and joint workshops. However, without organisational support structures to provide clinicians time to undertake the ongoing co-design work, much of the prototyping and iterative development of the intervention components were undertaken by the service users. This is a common issue evident in co-design studies in both mental health and general settings.[74] There is a need for healthcare organisations to reconfigure their services so clinicians can meaningfully participate in such endeavours and encourage a sense of joint ownership over the work.

Although the process was highly collaborative and involved service users, carers and clinicians to varying degrees, it was conducted at just one NHS site, which represents a possible limitation. Transferability of our processes to other settings cannot be guaranteed. However, to our knowledge, this is the first time the BCW has been translated for use with participants who have mental health problems and used within an integrated co-design-behaviour change process. This new and novel approach will require further testing to ascertain whether it is suitable and translatable to other intervention development processes. Given that participants were a self-selecting, motivated sample of clinicians, service users and carers, their views may not be representative of all patients and clinicians in the organisation. During the final stage of co-designing *Let's Talk* the global COVID-19 pandemic took place. We continued our co-design activities remotely; however, a planned quasiexperimental pretest/post-test using a structured observational tool[49] had to be postponed. The tool examines the amount, type (eg, interactive, individual, verbal, non-verbal or solitary) and quality (eg, positive feedback, praise, smile, ignoring, reprimand, discouragement, neutral behaviours) of nurse–patient interactions.[49] Pretest data on one control and one intervention ward were collected in April to June 2019 and we plan to collect post-test data when we are able to do so and publish the results of this study.

CONCLUSIONS

This paper has described the implementation of a new theory-driven co-design-behaviour change approach used to develop the *Let's Talk* intervention toolkit. It offers tools that others may use, or adapt as necessary, to implement the approach in their settings. It also describes the behavioural mechanisms behind the *Let's Talk* intervention toolkit to improve the amount and quality of nurse–patient therapeutic engagement on acute mental health wards. Our paper makes a timely and novel contribution to further both participatory methods and behaviour change theory. The approach enhances EBCD by introducing a robust behavioural change theory to help guide the development of a complex intervention. In turn, our participatory approach also enhances the BCW by setting out a practical guide on how to meaningfully involve service users and other stakeholders when designing complex implementation interventions.

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6.3 Service user, carer and clinician feedback workshops

The aims of these workshops were to 1) validate the findings from the narrative interviews with service users, carers and clinicians (as discussed in the previous chapter), 2) agree on service user, carer and clinician improvement priorities to be taken forward to the joint co-design workshop and 3) to generally foster feelings of ownership over the project.

6.3.1 Preparation of the workshops

Before the workshops, advice and support was sought from the lived experience practitioner who agreed to facilitate the workshops (IX). IX had a lot of previous experience conducting EBCD projects in mental health settings (e.g., Springham & Robert 2015). We met in person and spoke on the telephone several times to discuss the workshop agenda, timings, potential activities and how to create an environment that would facilitate open and free discussion. Useful tips she gave me were to be sure to emphasise the expertise of the participants and ask probing questions that would enable them to discuss their knowledge and experiences of giving and receiving therapeutic engagement. As recommended in the literature, the environment was designed to encourage inquiry and be reflexive rather than directive (Lin et al. 2011).

At least two weeks before the events, as recommended by the EBCD toolkit (Point of Care Foundation 2020), clinicians working at the research site and service users and carers who had been previously interviewed were invited to attend two feedback workshops (see Appendix C2 for example of the invitation). Initially 10 people said they would attend the service user and carer workshop, however on the day, seven participants attended. Two were no shows and gave no reason for not attending and one service user had been admitted to an acute ward at the Trust and despite the clinicians agreeing to her attendance at the event (which was in the same building as her ward), she said they would not let her leave the ward because the consultant was due to see her. Initially 11 clinicians said they could attend the clinician feedback workshop, however this had to be postponed at the last minute due to logistical reasons relating to a change of ward manager. The event was rescheduled, and six clinicians attended. These clinicians were not the same clinicians who had taken part in the interviews, however prior to the event I met individually with four of the 12 interviewed clinicians to feedback the results of their interviews and understand what their improvement priorities were. Further examination of the impact of this is discussed in Chapter 9.

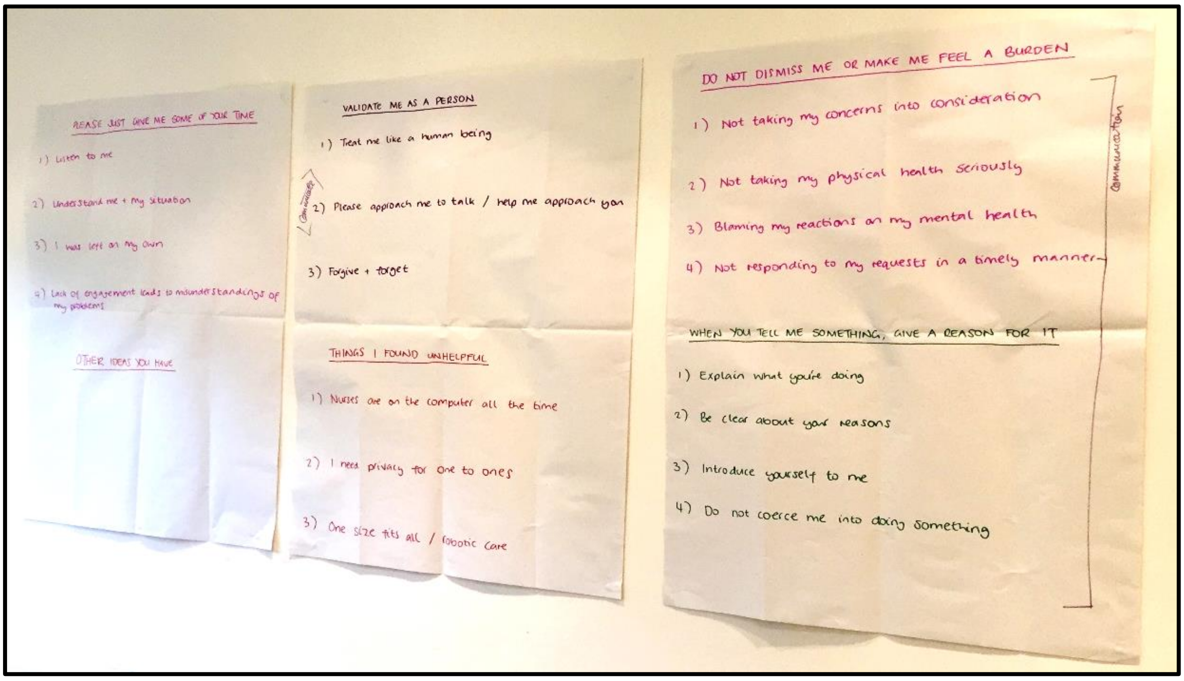
The workshops were located in a conference room at the participating Trust (Figure 10). After discissions with the clinical team and service users this was considered the most convenient place as it was close to most of the service users' homes, and it allowed the clinicians to be close to their ward if they were needed to assist their colleagues. The service user and carer workshop was due to run from 1100 – 1500, with a 30-minute lunch break. IX and I had thought it would be best not to make the day too long due to the effects that some psychotropic medication may have on the participants' ability to concentrate for long periods of time. However, the conversation flowed, and the participants wanted to stay for longer, so the session ended at 1700. As the clinician feedback workshop was held on the same day as the joint co-design workshop, it could only run from 0900 – 1130 to ensure the participants had enough time to eat lunch and take a break between sessions.

Figure 10 – location of the feedback workshops

6.3.2 Delivery of the workshops

At both workshops, on arrival participants were given a pack that contained a workbook to guide them through the day (Appendix C3), a consent form, evaluation form and Love to Shop vouchers as a token of appreciation for their time. The events were divided between providing a basic overview of the EBCD process, and the purpose and aims of the study, feeding back the findings from the observations and interviews and encouraging discussion and debate over the data. The interview data was displayed in poster format on the walls, presented under the five main themes and touchpoints discussed in the previous chapter (see Figure 11 for example of posters for service user and carer workshop).

Figure 11 – Poster displays of service user and carer interview data



PLEASE JUST GIVE ME SOME OF YOUR TIME

1) Listen to me
2) Understand me + my situation
3) I was left on my own
4) Lack of engagement leads to misunderstandings of my problems

OTHER IDEAS YOU HAVE

VALIDATE ME AS A PERSON

1) Treat me like a human being
2) Please approach me to talk / help me approach you
3) Forgive + forget

THINGS I FOUND UNHELPFUL

1) Nurses are on the computer all the time
2) I need privacy for one to ones
3) One size fits all / robotic care

DO NOT DISMISS ME OR MAKE ME FEEL A BURDEN

1) Not taking my concerns into consideration
2) Not taking my physical health seriously
3) Blaming my reactions on my mental health
4) Not responding to my requests in a timely manner

WHEN YOU TELL ME SOMETHING, GIVE A REASON FOR IT

1) Explain what you're doing
2) Be clear about your reasons
3) Introduce yourself to me
4) Do not coerce me into doing something

Emotional mapping is a powerful tool often used within EBCD processes. It offers a way for individuals to make sense of their own experiences whilst connecting their experiences to the experiences of others. This creates a story which explains how a service is collectively experienced (Iedema et al. 2010, Piper et al. 2012, Bowen et al. 2013, Locock et al. 2014). As described in the published paper, an emotional mapping exercise encouraged participants to rate their touchpoints from most important to least important, which provided an understanding of the most important collective experiences. From this, improvement priorities could be identified that were rooted in the service user, carer and clinicians' experiences of giving and receiving care. These improvement priorities were written on poster paper, then ranked in a dot voting exercise so the most popular improvement priorities could be taken forward to the joint co-design workshop (see Figure 12 and Figure 13 for pictures of the dot voting exercises).

Figure 12 – Clinicians doing the dot voting exercise

Figure 13 – Results of the clinicians’ dot voting exercise

6.4 Making the trigger film

Although the trigger film was not discussed in detail within the published paper, as with many other EBCD projects (e.g., Locock et al. 2014, Springham & Robert 2015) the trigger film was central to the EBCD process, particularly at the joint co-design workshop, thus deserves further discussion here (see Box 2 for the link to watch the trigger film). The purpose of the trigger film is to bring together the service user and carer interview data into a film that represents their collective touchpoints. The film ensures that the service user and carer voice is heard and shows the clinicians exactly how service users experience their service. This stimulates open discussions between the service users, carers and clinicians about how change could occur (Point of Care Foundation 2020).

Box 2 – Link to watch the trigger film

https://vimeo.com/545101748/c87b8cba8a

The trigger film in this study was made in the following way: the filmed or audio recorded service user and carer interviews were uploaded onto a secure network and the files were transferred to the production agency. The agency put a timer on top of the interviews so I could easily identify where each touchpoint was located. Once all the touchpoints were identified I emailed the production company with the specific times they appeared on each participant's filmed or audio recorded interview. The production company then created a film for each participant that included snippets of all the identified touch points with a secure link that each participant could access. Each participant was given the secure link relating to their personal touchpoint film, along with a touchpoint ranking sheet (Appendix C4). Participants were asked to view their touchpoint films, then indicate on their ranking sheet their first, second, third and fourth most important touchpoint, in which I could choose at least one to include within the trigger film. Once this information was collated, I developed a film script (Appendix C5), which set out exactly what should be included in the film, including the touchpoints of choice from each service user and carer. This script was sent to the production company and they began producing the film. I also had a two-day session with the film producer to refine the initial film and ensure it looked the way I wanted it to before showing it to the service users and carers to get their feedback and input.

This first version of the film was shown to the service users and carers at their feedback workshop. This enabled them to see a full version of the film before it was shown to the clinicians at the joint co-design workshop. This also gave the service users and carers a chance to suggest refinements and make a final decision as to whether they wished to feature in the film. There were no suggested refinements and none of the service users or carers present on the film wished to be removed once viewing it. In keeping with ethical requirements, a two-stage consent process was put in place to ensure that the service users and carers were making an informed decision about appearing on the film and to set out precisely what would happen to the film and the data they provided. The steps were as follows:

1) A regular consent form was signed where service users and carers gave their permission to be interviewed. This included indicating whether they wanted to be filmed or simply audio recorded (see Appendix B3 for consent form)
2) After viewing their individual touchpoint films participants were asked to sign a release form asking for their consent and release of the footage for use in the 30-minute trigger film and for future educational purposes within the NHS Trust and King's College London (see Appendix C6 for release form)

6.5 The joint co-design workshop

The joint co-design workshop marks a significant moment in intervention development, where the service users, carers and clinicians come together, and their experiences are translated into joint priorities for improvement (Bate & Robert 2007). The aims of this workshop were to 1) select and agree on joint improvement priorities brought forward from the service user and staff feedback workshops, 2) collectively map the identified influences on engagement onto the joint improvement priorities, 3) begin the early stages of co-design work and 4) collectively agree on how to take the project forward. This was guided by the BCW, as discussed within the published paper.

6.5.1 Preparation of the workshop

Preparation for the workshop began in September 2019, once the analysis of participant interviews had been completed, but before the film was made. I wanted to ensure that enough notice was given so that it was logistically possible for the ward clinicians to attend, thus much work was done to organise cover for the ward and choose a date when most of the clinicians who were interviewed were on shift. November 12th, 2019 was the date agreed between the clinicians, the service users and carers and IX. I sent out invitations that included the study information sheet and details of what the day would entail. Two weeks before the workshop, the ward manager informed me that he was to leave the ward with immediate effect, and it would be too disruptive to the ward for the workshop to go ahead when planned. I immediately informed the service users and carers and linked with the interim ward manager to arrange another suitable date – the 21st November 2019. Unfortunately, we were not able to arrange a date that enabled IX to attend, thus I facilitated the workshop with the help of another nursing researcher colleague (SC). Observing IX facilitate the service user and carer feedback workshop was incredibly helpful for giving me the confidence to facilitate this workshop myself.

Initially 18 people were due to attend the workshop: seven service users, one carer and 10 clinicians. In reality, 13 people attended. One carer cancelled on the morning due to caring responsibilities and four clinicians were unable to attend due to clinical responsibilities or being on a day off. The EBCD toolkit suggests running the workshop over three hours (Point of Care Foundation 2020), however due to the service user feedback workshop overrunning, it was decided that this workshop should be run for 4.5 hours from 12:30 – 1700, beginning with lunch where people could eat together and break the ice before commencing the discussions. The workshop was held in a large conference room at the participating Trust in the same building as the feedback workshops. As with the feedback workshops, on arrival participants were given a pack that contained a workbook to guide them through the day, a consent form, evaluation form (Appendix C7) and Love to Shop vouchers as a token of appreciation for their time. Before the workshop began, I requested that the participants complete their consent forms and ask any questions they may have. SC collected these, made copies and returned them to the participants.

6.5.2 Reactions to the trigger film

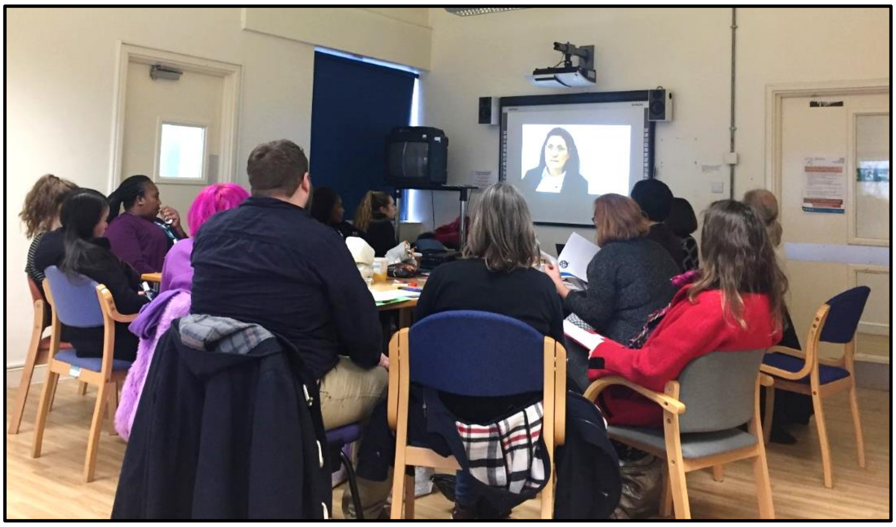
When shown at the joint co-design workshop, the trigger film created the opportunity for the service users, carers and clinicians to have a very open and moving conversation about their experiences, fears and assumptions about each other. Initially I had been quite nervous about showing the film to the clinicians. Many of the service users' experiences were negative and I did not want to alienate the clinicians. To try to overcome this, I followed a negative account with a positive account and after one particularly negative segment of the film, I paused it and allowed the group time to reflect and air their feelings so they could then concentrate on the remainder of the film. I ended the film with a positive segment, then a segment that identified potential ideas for improvement, so the group were left thinking about solutions rather than negatives. Despite my fears, the clinicians handled the film very well and it stimulated some pertinent discussions that led to improvement ideas.

Initially some clinicians were defensive, particularly regarding the topic of controlling or coercive care. They justified this by saying that control and coercion was a necessity to keep some people safe. This was clearly a core belief held by some, which we later highlighted as being potentially difficult to address within the intervention. This led to some emotional, yet constructive discussion between the service users and clinicians about their experiences of coercive care. Most service users agreed that rapid tranquilisation may be necessary as a last resort, if a person is truly a danger to themselves or others; however, they felt that clinicians often used this as a threat to coerce them into doing something they did not want to do, particularly when it came to medication administration. There was unanimous agreement between service users, carers and clinicians that it was never acceptable to threaten people, however the clinicians said they felt they always fully justified procedures such as medication administration or rapid tranquilisation whereas the service users said that procedures were often not justified, and they felt threatened or coerced into taking part.

This conversation caused me some anxiety as it was a very emotive topic which all parties clearly felt strongly about. Eventually I had to intervene because the conversation came to a stalemate and no longer felt constructive. To facilitate a more constructive approach I said: “we can see that this is an issue for people on both sides, so what do we think a solution to this would be?”. This enabled individuals to see past their own point of view and begin to look at the bigger, collective picture as a co-design team. From this, early ideas for the workbook were created, particularly around helping clinicians articulate procedures and conversations in a way that was understandable to service users who may be suffering medication side effects and acute mental distress.

Overall, many of the clinicians said they were “blown away” by the film and that it was a “real eye opener”. They felt that all clinicians on their ward should see the film, which led the conversation onto the potential of developing a training film for nurses that incorporates the service users’ and carers’ experiences of therapeutic engagement. Figure 14 shows the service users, carers and clinicians watching the trigger film.

Figure 14 – Co-design team watching the trigger film



6.5.3 *Agreeing on joint improvement priorities*

To foster a sense of collaborative ownership, it is recommended to support a member of staff and a service user to present their improvement priorities at the joint workshop (Point of Care Foundation 2020). While no clinicians volunteered to do this (discussed in more depth in Chapter 9), I was able to support one member of the core service user group to present the service user priorities. This resulted in much discussion around the similarities and differences between service users' and clinicians' priorities. It was recognised that although the priorities from each group were presented using different language, the sentiment behind what was being said was similar. For example, the clinician priority of improve the way we communicate with service users recognised the need for clinicians to fully explain their reasoning behind their decisions and actions, which had similarities to the service user priority treat me like a human being, which highlighted the need to reduce coercive or one-size-fits all care. Table 11 shows the links between the service user and clinician priorities.

Table 11 – Representation of the relationship between the original and shared improvement priorities, based on the affinity grouping exercise

Joint priorities	**Service user & clinician priorities they came from**
Improving nurse-patient communication	Improve the way we communicate with service users (clinicians) Nurse-patient communication needs to be improved (service users) Treat me like a human being (service users)
Improve team relations and ward culture	Communicating leave (clinicians) Improve the culture around response (clinicians) Improve the way messages are handed over within the team (clinicians)
Nurses to help service users help themselves	Help me help myself (service users) Treat me like a human being (service users) Nurse-patient communication needs to be improved (service users) Improve the way we communicate with service users (clinicians) Forgive and forget (service users)
Increasing nurses' confidence when interacting with service users	Improve the way we communicate with service users (clinicians) Nurse-patient communication needs to be improved (service users)

As discussed in the published paper, an affinity grouping exercise enabled the four shared improvement priorities to be developed. Affinity grouping is used when ideas or suggestions from collaborative meetings are required to develop a new process (Dorrington et al. 2016), thus it was well suited to identifying joint priorities from the individual priorities. The individual priorities were written on post it notes, then moved around until they could be matched or put into common themes. Figure 15 shows service users and clinicians discussing the affinity grouping exercise.

Figure 15 – The affinity grouping exercise in action

6.5.4 *Conducting the written exercise*

As described in the published paper, the large co-design team split into smaller groups to conduct a written exercise (Appendix C1). Within their workbooks I provided them with a list of their previously identified COM-B influencers and a list of intervention functions, translated into their own words, which was used as a starting point to examine their joint priorities and build the content of the intervention. SC and I moved around the small groups ensuring everybody understood and asked probing questions to stimulate ideas when groups appeared to be stuck. Figure 16 shows an example of the small groups. This exercise lasted for about an hour, then I brought the group back together as one and asked a person from each of the smaller groups to present the work they had done so far. This resulted in further discussion and refinement of the improvement priorities. The co-design work brought to light how broad some of the improvement priorities were, in particular the improvement priority “improving nurse-patient communication”. It was decided that this priority would be addressed within all the improvement priorities as the aim of the work was to improve therapeutic engagement. Therefore, we created a more specific improvement priority called “improve communication with withdrawn people”, with the specific aim of increasing therapeutic engagement with service users who often isolate in their bedrooms.

Figure 16 – Me facilitating a small group of service users and clinicians working on the early stages of co-design

6.6 Designing and refining the intervention

As described in the published paper, a series of small co-design team meetings and feedback from my PPI group enabled the intervention to be iteratively refined until it was ready for initial testing and evaluating. During this period, I found it quite difficult and sometimes overwhelming to take onboard every idea that was suggested. I was particularly anxious because I was working to a tight deadline and often the process felt completely uncontained and out of control. At times I was tempted to simply fall back on the first iteration of the intervention as its development was guided by evidence-based behaviour change theory. However, I knew that would not necessarily make it acceptable to the service users, carers and clinicians who would eventually use it in practice. This understanding gave me the impetus to overcome my anxieties, continue the co-design work and refine the intervention based on the co-design team and PPI group's feedback.

There were many conflicting points of view, for example the co-design team wanted to keep the workbook simple. Feedback from the PPI group suggested that some of the exercises needed more explanation, however they also suggested that because people using the workbook would be in an acute phase of mental ill-health the number of words used to describe the exercise should be kept to a minimum and bullet points may be better than sentences. Achieving the right balance between explaining the exercises yet keeping the workbook simple was challenging. Much thought and work was put into how to succinctly describe the purpose of each exercise, using language that the co-design team thought they would be able to understand at the times they had been acutely unwell.

After the joint co-design workshop, it had been agreed that the workbook should contain an explanation of some of the procedures that took place on the ward. This stemmed from the emotional discussion between the service users and clinicians discussed in section 6.5.2, which highlighted how the nurses felt they explained procedures to service users, but service users often felt threatened, coerced and unsure of what to expect. To bridge this gap procedures such as ward round, medication administration and restraint were considered potentially useful to include. One member of staff took the lead on designing the restraint procedures section, however when the service user segment of the co-design team saw some of the initial prototypes there was unanimous agreement that including a procedure such as restraint in the workbook would be considered threatening, untherapeutic and counterproductive. The decision was made not to include the restraint procedures. I was nervous about telling the member of staff how the service users reacted; however, she took their feedback onboard and was very understanding.

This brought to light the importance of managing people's expectations. The co-design team put a great deal of time, effort and thought into the intervention toolkit, however not all ideas were considered feasible, thus letting people down diplomatically whist still acknowledging their ideas was a skill I learnt fast. Another example of this was when a carer had the idea of a compassion champion, which would be used to address improvement priority 4: improve team relations and ward culture. This would be a new role that an existing member of staff would apply and interview for, with a specific job description and person specifications. The purpose of the role would be to advocate for both service users' and clinicians' wellbeing within the organisation alongside their clinical role. Many of the co-design team wanted to take this idea forward, however after careful consideration and discussions with senior management it was decided that although a promising idea, it would not be feasible. In the current climate, the Trust could not justify the additional resources that would be required to recruit somebody for this position. Although the carer was disappointed that her idea could not be part of *Let's Talk,* we agreed that this new role may be something we could pick up again in the future.

The door sliders went through many iterations, starting off as a set of several different emotions cards that could be displayed on service users' doors and ending up as a slider with two choices: green to request therapeutic engagement and grey to indicate no engagement is needed. Similar to the workbook, the overarching feeling was that these should be kept as simple as possible, thus settling on the decision to have sliders that gave the choice of engage or do not engage rather than depicting several different emotions. Although much thought had been put into these sliders by the small co-design team responsible for their design, when I brought the small teams together to discuss their work, a service user on another small co-design team had a very strong negative reaction to them. She felt that some service users may not use the door sliders, even if they did want to engage, thus nurses may use the signs as an excuse for not engaging when really nurses should be encouraged to engage with all service users, even if they do not initiate the interaction. We were able to resolve the issue by co-designing a notice to be put on the inside of service users' doors encouraging them to use the door sliders if they get the urge to talk (see Appendix C1 for example). We also agreed that it is already a requirement for nurses to initiate some form of interaction with service users each hour, which they recorded on the hourly observation sheet; thus, nurses would not be able to use the door sliders as an excuse to ignore service users.

6.7 Considerations for implementation

Literature highlights the importance of considering implementation processes throughout all stages of intervention development (Craig et al. 2008) and has been identified as a specific approach to intervention development as discussed in Chapter 3 (O'Cathain et al. 2019a). While an explicit implementation approach was not employed in this study, the very nature of the BCW approach encourages intervention designers to consider implementation. Some BCTs enable implementation to be explicitly integrated into an intervention. An example of this is the BCT of action planning, which prompts detailed planning of the performance of a behaviour (Michie et al. 2014). One element of *Let's Talk* requires nurses to record on an hourly observation sheet whether a service users' request for therapeutic engagement has been met. If the request cannot be met immediately the observation sheet prompts the nurse to plan with the service user about when therapeutic engagement will occur, essentially ensuring nurses plan how they will implement engagement with a service user. This will enable nurses to adapt their approach to engagement to suit their own practice, rather than having to follow a prescriptive implementation plan that tells them when and how they should engage.

Implementation processes related to other elements of the toolkit were less explicit, however still considered. There was much debate surrounding the best time to give service users the Conversation Companion workbook. Initially it had been thought this should be given as part of the welcome pack. Literature, however, shows that admission to an acute ward can often be a confusing and chaotic experience, with service users' mental state being at its most acute (Deacon et al. 2006). With this in mind, it was decided that a better time to give the workbook would be at a service user's first ward round. This would ensure that service users had settled into ward life and sufficient time could be set aside to explain the purpose of the workbook at the ward round. These assumptions will be empirically tested during Phase 3 of this research. There was also debate about when and how the training film should be shown to nurses. For the purpose of this study, it was decided that clinicians on the intervention ward would attend an initial meeting that introduced *Let's Talk* and the film would be shown at this meeting. If these clinicians found the film to be acceptable, in the future it would be rolled out Trust wide with the assistance of the training and simulation team and included as part of nurses' yearly mandatory training.

6.8 The integrated co-design-behaviour change approach

An unanticipated outcome of the study was that the integrated co-design behaviour change approach became an intervention separate to that of *Let's Talk*. This process enabled some clinicians to begin small but significant changes in their behaviours. This was highlighted in a reflective account by a peer support worker who said:

> *"I also identified a service user on the ward who matched the type of individual we were trying to help. Taking part in the study therefore directly affected how I approached service users and subsequently, I have managed to engage in some really good work with the individual."* - Service user and peer support worker

This sentiment was echoed by clinicians in feedback questionnaires given at the end of each feedback and co-design workshop:

> *"The emotional mapping exercise and discussions were very thought provoking and will definitely lead me to improve/adapt my current approach."* – Clinician at feedback workshop
>
> *"I saw the film once before…this time it was 10 times more powerful. For staff to hear those present [at the joint co-design workshop] I think made them think. Think about what they are doing, how they are acting, how simple things can make a real difference."* – Peer support worker after watching the film

As illustrated by the quotes above, it was clear that the co-design process positively impacted on some clinicians' behaviours. There is a growing body of evidence that examines the mechanisms behind how EBCD and co-design approaches may work (Palmer et al. 2019, Mulvale et al. 2020). Phase 2b of this PhD study, presented in the next chapter, will further examine the potential mechanisms of action related to EBCD and the specific co-design behaviour change approach implemented in this study.

6.9 Chapter summary

This chapter has presented the second phase of the intervention co-design process: the co-design phase and brought together findings from the systematic integrative review in Chapter 4 and the observations and interviews in Chapter 5 to inform the co-design process. It has described how a novel integrated co-design behaviour change approach was implemented with service users, carers and clinicians to co-design the *"Let's Talk"* complex behaviour change intervention toolkit to improve therapeutic engagement. This intervention was based around four joint improvement priorities. It also describes the behavioural mechanisms behind *"Let's Talk"* ensuring that the intervention is both replicable and measurable.

CHAPTER SEVEN
PHASE 2B: MECHANISMS UNDERPINNING CO-DESIGN

7.1 Chapter overview

The preceding chapter provided a comprehensive overview of the theoretically driven behaviour change co-design intervention development process. This process culminated in an intervention toolkit that aims to improve nurse-patient therapeutic engagement on acute mental health wards by addressing four joint service user and clinician improvement priorities:

1) Improve communication with withdrawn people
2) Nurses to help service users help themselves
3) Increasing nurses' confidence when interacting with service users
4) Improve team relations and ward culture

Through service user, carer and clinician accounts it was clear that the co-design process initiated behaviour change independent of the intervention toolkit. The following chapter presents data that was collected as part of an evaluation of the EBCD process, focusing on the behavioural mechanisms through which EBCD may facilitate change. The chapter presents the manuscript of the article for this study which has been submitted for publication in Health Expectations. All study documents are presented in Appendix D.

7.2 Submitted paper

Title: What mechanisms of change enable participatory design approaches for improving healthcare services design? Developing a taxonomy of behaviour change techniques from an Experience-based Co-design study on an acute mental health ward

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ABSTRACT

Background: Whilst it is known that participatory design approaches may change individual behaviour, only a handful of studies examine the mechanisms of action behind co-design and other participatory processes in the context of healthcare service improvement.

Objective: To explore how a co-design approach called Experience-based Co-design (EBCD) may change behaviour and create the first taxonomy of behaviour change techniques and mechanisms of action related to EBCD.

Methods: 1) documentary analysis of an online EBCD toolkit, an EBCD protocol (UNITED study) and EBCD event evaluation questionnaires (n=28) 2) twenty-four hours of participant and non-participant observations of the three UNITED study EBCD workshops and seven small co-design team meetings. Documents and observational field notes were coded using the Behaviour Change Wheel, Behaviour Change Technique Taxonomy, COM-B model of behaviour change and the theoretical domains framework.

Findings: EBCD as applied in the UNITED study consisted of 31 behaviour change techniques (BCTs), seven of which were identified using all data sources. The most frequent mechanisms of action were reflective motivation (particularly “goals”, “beliefs about consequences”, “beliefs about capabilities” and “intentions”) and social opportunity (particularly “social influences”).

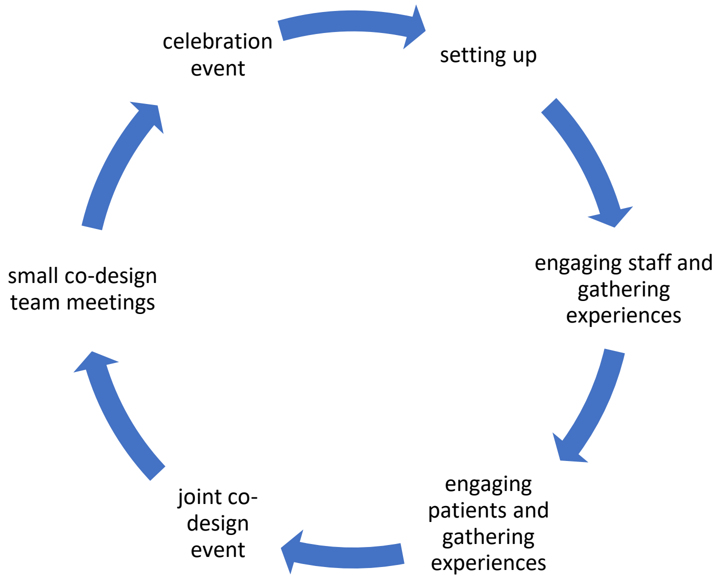
Conclusions: Using a behavioural science methodology and triangulation from four data sources, our findings offer a systematic, empirically grounded, and theoretically driven approach to specifying the BCTs and potential mechanisms of action for EBCD employed in an acute mental health inpatient setting and highlight previously unidentified links between BCTs and mechanisms of action.

BACKGROUND

Broadly speaking, co-design approaches use experiential knowledge and collaborative, creative methods to identify and develop solutions to shared problems and enhance the design and delivery of public services (1). Born from the idea that to improve a system, those who use it must also play a vital role in designing it, co-design is rooted in the participatory design movement that began in Scandinavia in the 1970s (2). Participatory and collaborative approaches to service design have subsequently been applied in several sectors, including healthcare (3); however, placing emphasis on service user (and/or patient) participation rather than simply staff participation remains a relatively new development in the context of working to improve the quality of healthcare services (4). One participatory design approach, specifically developed within and for use in the healthcare sector, is Experience-based Co-Design (EBCD) (5).

EBCD is a structured, participatory approach that aims to understand and design service improvements based on the collective experiences and expertise of service users, carers and clinicians. As well as user-centred design, the EBCD approach draws on narrative-based approaches to change, learning theory and participatory action research (6). EBCD, as detailed in a freely available online toolkit (7) and shown in Figure 1, is divided into six stages which are premised on meaningfully engaging service users, carers and staff as partners within a change process. First, the perceptions and experiences of service users, carers and staff are explored to gain an in depth understanding of what it is like to receive or deliver a particular healthcare service or participate in an interaction. Through the identification of individual “touchpoints” (any significant experiences, good or bad), and their representation in a “trigger” film, service users, carers and staff are then brought together in a facilitated process to co-design and implement improvement solutions in equal and active partnership with each other (7).

Figure 1 – The Experience-based Co-design cycle (8)

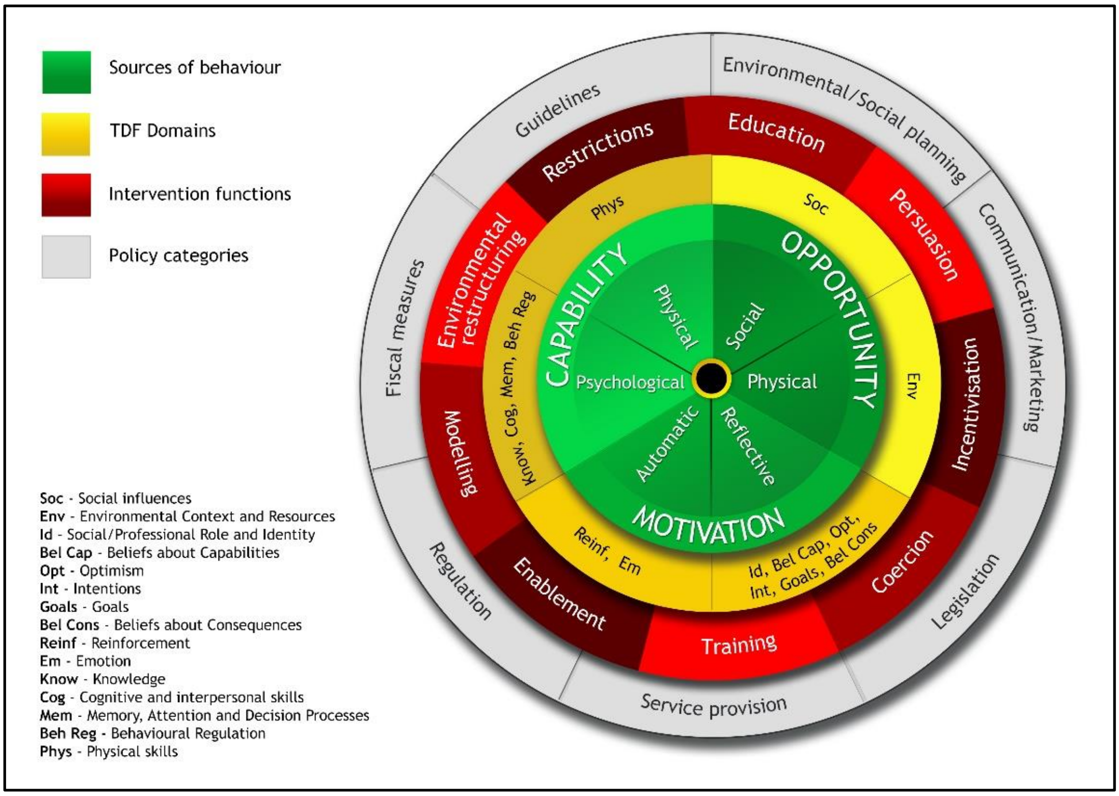


EBCD has grown in popularity and scope since first being piloted in 2005 in a head and neck cancer service in the United Kingdom (UK) (4). The approach has been used to improve services in several other countries including Australia, New Zealand, Canada, Sweden, the Netherlands and the United States of America (8,9). Projects have been undertaken within a variety of contexts including but not limited to adult and young person's mental health (10,11), individuals re-entering health and social care services after jail (9), adult and older people accessing emergency department services (12,13), carers in a cancer service (14) and inpatient stroke services (15). EBCD was traditionally used as a service improvement method but has more recently been applied as a method for co-designing patient-centred interventions, often in line with the UK Medical Research Council's (MRC) (16) guidance for developing and evaluating complex interventions (e.g., 14,17,18).

In a review of 59 EBCD studies, survey responses suggest that involvement in the EBCD process may impact on the way that staff behave (8). Emotional responses triggered by the process reminded staff why they do what they do, which led to changes in the way that staff worked with and listened to patients. The process also enhanced accountability and responsibility between staff members (8). Researchers are beginning to consider some of the mechanisms underpinning co-design in the healthcare sector (e.g., 11,19). A series of relational transitions which see participants move from an individualised understanding of their experiences to a collective understanding that fosters cooperation and empowerment to create change has been hypothesised (19). However, we are yet to understand which specific behaviour change techniques (BCTs) and mechanisms of action can support such transitions. A clearer understanding of why behaviour change occurs may help to determine which components of EBCD are most effective either singularly or in combination and ensure the retention of essential components which are most likely to enable healthcare service improvement.

The Behaviour Change Wheel (BCW) (Figure 2) is a robust framework that integrates several behaviour change theories; it is used to design and evaluate behaviour change interventions (20). Its core layer, the COM-B model, suggests that an individual's capability (psychological or physical), opportunity (social or physical) and motivation (automatic and reflective) interact to result in behaviour. The COM-B model aligns with the Theoretical Domains Framework (TDF) (21), which used expert consensus methods to simplify and amalgamate behavioural theories and constructs into 14 theoretical domains that influence behaviour change (Appendix D1). The middle layer of the BCW comprises nine intervention functions by which an intervention may change behaviour.

Figure 2 – The Behaviour Change Wheel (20)



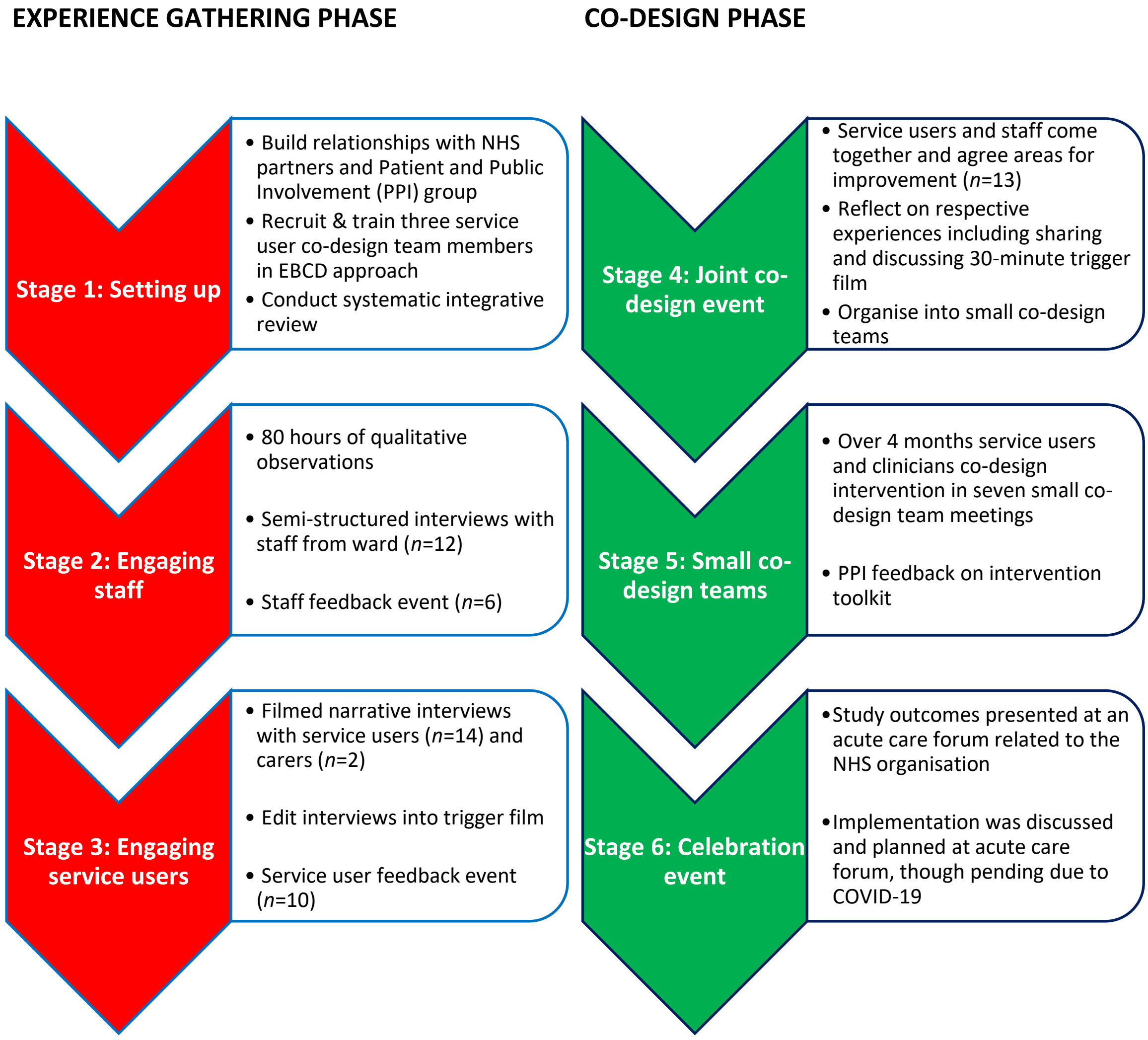
The Behaviour Change Technique Taxonomy (BCTTv1) is a taxonomy of behaviour change techniques (BCTs), which enable the standardised reporting of intervention content (22). The intervention functions may consist of several context dependent behaviour change techniques (BCTs), which make up the active ingredients of an intervention (22,23). The BCW and accompanying BCTTv1 have been used retrospectively to characterise existing complex interventions in a range of clinical settings, for example smoking cessation (24), sepsis identification (25) and physical activity and healthy eating (26). However, the BCW has not been used to characterise and explore an Experience-based Co-design process. The aims of this study were threefold:

1) To develop the first taxonomy of BCTs relating to EBCD using the BCW functions and BCTTv1
2) To use the TDF and COM-B model to characterise EBCD's potential theoretical mechanisms of action and how they work either singularly or in combination to bring about behavioural change
3) To examine the utility of this theoretically driven approach to identify whether, how and why EBCD works.

METHODS

This study is part of the larger UNITED (**UN**derstanding and **I**mproving **T**herapeutic **E**ngagement) project that used EBCD and the BCW to co-design an intervention to improve nurse-patient therapeutic engagement on acute mental health wards (18,27). Figure 3 shows the EBCD process as applied within the UNITED study. The UNITED study is also part of a joint Swedish/UK research programme, which is examining the mechanisms, measurement, models and management of co-production with the aim of enhancing its value for improving the health and wellbeing of citizens (28). Ethical approval for the UNITED study was obtained from the London Fulham Research Ethics Committee (reference: 18/LO/2193 28.01.2019).

Figure 3 – EBCD as applied within the UNITED study



Stage 1: Setting up

- Build relationships with NHS partners and Patient and Public Involvement (PPI) group
- Recruit & train three service user co-design team members in EBCD approach
- Conduct systematic integrative review

Stage 2: Engaging staff

- 80 hours of qualitative observations
- Semi-structured interviews with staff from ward (*n*=12)
- Staff feedback event (*n*=6)

Stage 3: Engaging service users

- Filmed narrative interviews with service users (*n*=14) and carers (*n*=2)
- Edit interviews into trigger film
- Service user feedback event (*n*=10)

Stage 4: Joint co-design event

- Service users and staff come together and agree areas for improvement (*n*=13)
- Reflect on respective experiences including sharing and discussing 30-minute trigger film
- Organise into small co-design teams

Stage 5: Small co-design teams

- Over 4 months service users and clinicians co-design intervention in seven small co-design team meetings
- PPI feedback on intervention toolkit

Stage 6: Celebration event

- Study outcomes presented at an acute care forum related to the NHS organisation
- Implementation was discussed and planned at acute care forum, though pending due to COVID-19

Procedures and data sources

Data on the EBCD process was collected using two methods:

1) Document analysis

We examined three documentary sources:

- the online EBCD toolkit that describes recommended EBCD practice (7)
- the UNITED study protocol
- participant responses to event evaluation questionnaires completed after each EBCD workshop in the UNITED study i.e. one clinician feedback workshop related to stage two of the EBCD process (six completed questionnaires) one service user feedback workshop related to stage three of the EBCD process (10 completed questionnaires), and one joint

service user, carer and clinician workshop related to stage four of the EBCD process (12 completed questionnaires) (See Appendix D2 for example questionnaire).

2) Participant and non-participant observations

Between October 2019 and March 2020, two researchers (SM & SC) trained in the BCW framework conducted 24 hours of observations at the clinician feedback workshop (stage two), service user feedback workshop (stage three), joint co-design workshop (stage four) and small co-design team meetings (stage five). This included one researcher conducting participant observations (SM) and the other (SC) non-participant observations of the service user and clinician feedback workshop and the joint workshop. One researcher (SM) also conducted participant observations of seven small co-design team meetings. Unstructured fieldnotes were taken that detailed what the participants said, group dynamics, body language, activities that were undertaken at the events, the co-design outputs and fidelity to the EBCD process. Fieldnotes were compared and discussed between the researchers and then collated. Reflective fieldnotes were also written after each EBCD workshop pertaining to the researcher's role in the EBCD process and how this may have impacted on group dynamics and event outputs.

Data analysis

Step one: Identifying BCTs within the EBCD process

Using the BCTTv1 (22) as an *a priori* framework, SM and IX independently read and coded the EBCD toolkit (7) and SM read and coded the UNITED study protocol, observation and fieldnotes and EBCD event evaluation questionnaires with relevant BCTs. The resulting list of BCTs were tabulated according to whether they were identified through the (a) EBCD toolkit, (b) study protocol, (c) observations and/or (d) event evaluation questionnaires. SM and IX compared and discussed their analysis. For added validation, GR, AS and VT reviewed and discussed the analysis until consensus was reached.

Step 2: Linking the BCTs to BCW intervention functions

SM then linked the BCTs to the intervention functions of the BCW. This was guided by the BCT/intervention function matrix published in the *Behaviour Change Wheel Guide to Designing Interventions* (20) (Appendix D3). Some BCTs can serve more than one function, for example the

BCT “feedback on behaviour” could be linked to the functions of incentivisation, coercion, education or persuasion depending on the context in which it was delivered. When this occurred, consensus on the most appropriate function was reached among authors, based on our knowledge and experience of using EBCD.

Step 3: Mechanisms of action

To understand the mechanisms underpinning how EBCD may change behaviour, SM mapped the identified BCTs to the TDF domains and their corresponding COM-B components. This process was guided by the Theory and Techniques Tool (29), and the following papers (21,30,31,32,33), which all link BCTs to their mechanisms of action. The results were then reviewed by GR, AS, VT and IX to further validate the process. Differences were discussed until consensus was reached.

RESULTS

Our analysis found that EBCD may change individual’s behaviour in two, broad ways: 1) by incrementally changing behaviour related to the phenomena being addressed within the EBCD process (in this case, therapeutic engagement) and 2) by changing the culture in which clinicians work through altering their behaviours to more collaborative forms of work both with each other and with their service users.

Identifying BCTs within the EBCD process

We identified 31 BCTs and seven BCW functions related to EBCD. Table 1 shows the BCTs and the type and number of data sources from which they were identified. Appendix D4 gives further details of these identified BCTs, including illustrative quotes from each relevant data source. Observations of EBCD workshops within the UNITED study identified the most BCTs, followed by the EBCD toolkit and event questionnaires. The UNITED study protocol identified the least BCTs. Seven BCTs were identified using all data sources. All but two BCTs were identified through observations, which suggests that to gain a full understanding of potential BCTs within an intervention, observing its delivery in practice is likely to be essential.

Table 1 – BCTs used in EBCD identified from four data sources

BCT supported by all four data sources	BCT supported by three data sources	BCT supported by two data sources	BCT supported by one data source
Goal setting (behaviour)	Review behaviour goal(s) (TK,O, Q)	Commitment (TK, O)	Discrepancy between current behaviour and goal (O)
Problem solving	Social support (unspecified) (TK, O, Q)	Monitoring of behaviour by others without feedback (TK, P)	Incompatible beliefs (O)
Feedback on behaviour	Satiation (TK, P, O)	Salience of health consequences (TK, O)	Information about antecedents (O)
Feedback on outcomes of behaviour	Restructuring the social environment (TK, O, Q)	Social comparison (O,Q)	Information about health consequences (O)
Information about others' approval	Focus on past success (TK, P, O)	Prompts and cues (TK, P)	Social reward (O)
Credible source	Action planning (TK, P, O)	Exposure (TK, O)	Identification of self as role model (O)
Pros and cons	Monitoring outcomes of behaviour by others without feedback (TK, P, O)	Vicarious consequences (P, O)	
	Behavioural experiments (TK, P, O)	Instruction on how to perform a behaviour (TK, O)	
	Reward (outcome) (TK, P, O)		
	Graded tasks (TK, P, O)		

TK – EBCD toolkit; P – UNITED study protocol; O – Observations; Q – event questionnaires

Table 2 presents a taxonomy of BCTs and mechanisms of action by linking the components of EBCD with their corresponding BCTs, intervention functions and mechanisms of action. The most commonly occurring BCTs were “focus on past success” (*n* = 7), “credible source” (*n* = 6), “pros and cons” (*n* = 5), “problem solving” (*n* = 5), “review behaviour goals” (*n* = 5), “instruction on how to perform a behaviour” (*n* = 4), “feedback on outcomes of behaviour” (*n* = 4) and “information about antecedents” (*n* = 4).

The most common function of the BCTs was enablement, which works by increasing means or reducing barriers to increase an individual's capability to perform the desired behaviour, beyond providing education or restructuring the environment (20). Education, persuasion and training were also commonly identified functions within the EBCD process. The most BCTs were found within stage 3: the joint co-design event, which had 26 BCTs serving five functions and stage 2: engaging staff and gathering experiences, which had 16 BCTs serving five functions. Stage 1: setting up had nine BCTs serving five functions, stage 3: engaging service users and gathering experiences had 10

BCTs serving four functions, stage 5: small co-design teams had five BCTs serving three functions and stage 6: celebration event had five BCTs serving four functions. Three BCTs were found to span the whole EBCD process: satiation (providing repeated expose to a stimulus that reduces drive for the unwanted behaviour), graded tasks (set tasks, making them increasingly difficult but achievable until the behaviour is performed) and behavioural experiments (advise on how to identify and test hypothesis about behaviour, its causes and consequences by collecting and interpreting data).

Mechanisms of action

The EBCD process could be linked to all areas of capability, opportunity and motivation, particularly reflective motivation (*n* = 20), which targets reflective processes that involve planning and evaluating (20) and psychological capability (*n* = 10), which strengthens an individual's stamina to engage in the mental processes necessary for the desired behaviour (20). EBCD also linked with 11 out of 14 TDF domains, which suggests that behaviour change within the EBCD process may be mediated through numerous pathways.

The most frequent theoretical domain was goals (*n* = 14), which was targeted through the function of enablement using the BCTs goal setting (behaviour), review behaviour goals, problem solving, discrepancy between current behaviour and goal and action planning. 'Goals' was broadly linked to the COM-B mechanism of reflective motivation, and we found this language more closely represented what we observed during the co-design process. We address this further in the discussion below.

Social influences were the second most identified mechanism of action (*n* = 12), which was predominantly targeted through the function of enablement using the BCTs vicarious consequence, restructuring the social environment and identification of self as a role model. Social influences were also targeted by the function of persuasion, using the BCTs social comparison, credible source and information about other's approval.

Knowledge (*n* = 8) was the third most frequent domain, which was predominantly targeted through the function of education using the BCTs feedback on behaviour, feedback on outcomes of behaviour and information about antecedents. Knowledge was also targeted through the function of training, using the BCT instruction on how to perform the behaviour. Other commonly identified mechanisms of action were beliefs about consequences (*n* = 6), beliefs about capabilities (*n* = 5), intentions (*n* = 4), social or professional role identity (*n* = 3) and environmental context and resources (*n* = 3).

Table 2 – Taxonomy of BCTs and mechanisms of action associated with EBCD

EBCD processes within UNITED study (by stage)	EBCD content		Mechanisms of action	
	BCTs	Intervention functions	TDF	COM-B
STAGE 1: SETTING UP				
Engage key stakeholders				
Met with senior leaders to introduce EBCD, analyse factors that may influence EBCD in practice and identify areas to focus the project on	1) Goal setting (behaviour) 2) Pros and cons 3) Problem solving	1, 2, 3) Enablement 2) Persuasion	1) Goals 2) Beliefs about consequences 3) Beliefs about capabilities	Reflective motivation
Provided promotional and educational documents about EBCD and the overarching aims of the project	1) Prompts and cues 2) Instruction on how to perform a behaviour 3) Problem solving	1) Education 2) Training	1) Environmental context and resources 2) Knowledge and skills	Physical opportunity, psychological capability
Staff, service users and carers continuously affirmed and re-affirmed their commitment to taking part in the project and planned context, frequency, duration and intensity of EBCD workshops and meetings	1) Action planning 2) Commitment	1) Enablement 2) Coercion	1) Goals 2) Intentions	Reflective motivation
Created a steering group of service users, carers and staff who met regularly to discuss the project and its progress in achieving its goals. This group supported other participants throughout the EBCD process.	1) Review behaviour goal(s) 2) Social support (unspecified)	1, 2) Enablement	1) Goals 2) Social or professional role identity	Reflective motivation
Steering group received training in the EBCD method	Instruction on how to perform a behaviour	Training and education	Knowledge and skills	Psychological capability
STAGE 2: GATHERING STAFF EXPERIENCES				
Observations of ward practice				
Observed nurse-patient interactions in the staff's practice area	1) Monitoring of behaviour by others without feedback	1, 2) Coercion	1, 2) Social influences	Social opportunity

	2) Monitoring outcomes(s) of behaviour by others without feedback			
Semi-structured interviews				
Interview questions examined peoples' personal experiences of engagement, their capabilities, opportunities and motivations to engage, what was good and bad about engagement (see 27 for full topic guide)	1) Pros and cons 2) Focus on past success	1, 2) Enablement	1) Beliefs about consequences 2) Beliefs about capabilities	Reflective motivation
Facilitated group feedback workshop to all staff involved in EBCD				
Workshop facilitator was a nurse (and/or somebody relatable to the group of staff who attended the workshop)	1) Credible source	Persuasion	Social influences^	Social opportunity
Brought staff together in a facilitated feedback event that gave feedback from observations of ward practice and semi-structured interviews based around identified touchpoints. Facilitator must attempt to inspire commitment and discussion among the group	1) Feedback on behaviour 2) Feedback on outcomes of behaviour 3) Information about antecedents 4) Commitment	1, 2, 3) Education 4) Incentivisation	1, 2^, 3) Knowledge 4) Intentions	Psychological capability, reflective motivation
Facilitated group discussion held outside of the ward environment that enabled staff to reflect on their practice and touchpoints, discuss past failures and successes, barriers and facilitators to engagement and learn from that	1) Review behaviour goal(s) 2) Social support (unspecified) 3) Social comparison 4) Information about others' approval 5) Pros and cons 6) Focus on past success 7) Vicarious consequences 8) Restructuring the social environment	1, 2, 5, 6, 7, 8) Enablement 3) Persuasion 4) Education and persuasion	1) Goals 2) Professional role and identity 3) Social influences 4, 5) Beliefs about consequences 6) Beliefs about capabilities 7, 8) Social influences^	Reflective motivation, social opportunity, physical opportunity
Conducted emotional mapping and dot voting exercise which set improvement priorities to take forward to joint co-design event	Goal setting (behaviour)	Enablement	Goals	Reflective motivation
STAGE 3: GATHERING SERVICE USER AND CARER EXPERIENCES				
Semi-structured interviews (some of which are filmed)				
Interview questions examined peoples' personal experiences of engagement, their capabilities, opportunities and	1) Pros and cons 2) Focus on past success	1) Enablement 2) Persuasion	1) Beliefs about consequences	Reflective motivation

motivations to engage, what was good and bad about engagement (see 27 for full topic guide)			2) Beliefs about capabilities	
Facilitated group feedback workshop to all service users and carers involved in EBCD				
Workshop facilitator is a service user (and/or somebody relatable to the group of service users who attended the workshop)	1) Credible source	Persuasion	Social influences^	Social opportunity
Facilitated group discussion held outside of the ward environment that enabled reflection on practice and discussion around identified touchpoints, past good and bad experiences, successes and failures, barriers and facilitators and learn from that. Facilitator must attempt to inspire commitment and discussion among the group	1) Review behaviour goal(s) 2) Pros and cons 3) Focus on past success 4) Restructuring the social environment 5) Commitment	1, 2, 3, 4) Enablement 5) Incentivisation	1) Goals 2) Beliefs about consequences 3) Beliefs about capabilities 4) Social influences^ 5) Intentions	Reflective motivation, social opportunity, physical opportunity
Provided group with feedback from observations of ward practice and semi-structured interviews based around identified touchpoints	1) Feedback on behaviour 2) Feedback on outcomes of behaviour 3) Information about antecedents	1, 2, 3) Education	1, 2^, 3) Knowledge	Psychological capability
Conducted emotional mapping and dot voting exercise to set improvement priorities to take forward to joint co-design event	Goal setting (behaviour)	Enablement	Goals	Reflective motivation
STAGE 4: JOINT CO-DESIGN EVENT				
Co-design workshop that brings service users, carers and staff together to discuss improvement priorities and begin to co-design change ideas				
Brought staff, service users and carers together in a co-design workshop outside of the ward environment with facilitators who were relatable to the workshop attendees	1) Exposure 2) Restructuring the social environment 3) Credible source	1) Environmental restructuring 2) Enablement 3) Persuasion	1, 3) Social influences^ 2) Environmental context and resources	Social and physical opportunity
Group discussion and affinity grouping exercise generated joint improvement priorities to base improvement strategies on	1) Goal setting (behaviour) 2) Review behaviour goal(s)	1, 2) Enablement	1, 2) Goals	Reflective motivation
Facilitated exercise that prompted the co-design team to analyse factors that influenced therapeutic engagement and selected strategies that may overcome barriers	1) Problem solving 2) Information about antecedents	1) Enablement 2) Education	1) Goals^ 2) Knowledge	Reflective motivation, psychological capability

Discussions that enabled service users, carers and staff to reflect on practice experiences, drew attention to discrepancies in staff's behaviour compared to set goals and consequences of poor-quality engagement	1) Discrepancy between current behaviour and goal 2) Social comparison 3) Information about others' approval 4) Credible source 5) Incompatible beliefs 6) Focus on past success 7) Vicarious consequences	1, 5, 7) Enablement 2, 4, 6) Persuasion 3) Education	1) Goals 2, 3, 4^) Social influences 5) Social / professional role and identity^ 6) Beliefs about capabilities 7) Social influences^	Reflective motivation, psychological capability, social opportunity
Participants were asked to form small co-design teams that would continue to meet and develop the intervention	Commitment	Enablement	Intention	Reflective motivation
View the trigger film from snippets of service users' and carers' interviews showing "touch points" and personal experiences				
Trigger film showed a series of "touchpoints". In the UNITED study, this included instruction and feedback on good and bad experiences of engagement, good and bad engagement techniques, how and why engagement did and did not happen and service users' personal stories of engagement	1) Feedback on behaviour 2) Feedback on outcomes of behaviour 3) Instruction on how to perform a behaviour 4) Information about antecedents 5) Information about health consequences 6) Salience of consequences 7) Information about others' approval 8) Credible source 9) Vicarious consequences 10) Focus on past success	1, 2, 4) Education 3) Training 4) Education 5, 6, 7, 8, 9) Persuasion 10) Enablement	1, 2, 3, 4) Knowledge 5, 6) Beliefs about consequences 7, 8^, 9^) Social influences 10) Beliefs about capabilities	Psychological capability, Reflective motivation, Social opportunity
Facilitated discussion about content of trigger film resulted in generation of improvement strategies	Problem solving	Enablement	Goals^ Emotion^	Reflective and automatic motivation
Highlighted discrepancies in what staff thought service users wanted compared to what they actually wanted	Discrepancy between current behaviour and goal	Enablement	Goals^ Emotion^	Reflective and automatic motivation
STAGE 5: SMALL CO-DESIGN TEAMS				
Smaller groups of service users, carers and staff co-design improvements based on their identified key priorities in partnership with each other				

Selected further strategies that may overcome identified barriers and developed a prototype intervention and agreed how intervention would be used to perform engagement	1) Problem solving 2) Instruction on how to perform a behaviour	1) Enablement 2) Training	1) Goals^ 2) Knowledge	Reflective motivation, psychological capability
Discussed strategies that have worked in the past	1) Focus on past success 2) Social comparison	1, 2) Persuasion	1) Beliefs about capabilities 2) Social influences	Reflective motivation
Small teams revised intervention prototype based on feedback from others	Review behaviour goal(s)	Enablement	Goals	Reflective motivation
STAGE 6: CELEBRATION EVENT				
Hold a celebration event to communicate outcomes of EBCD to others				
Attended an acute care forum and presented the outcomes of our work, including service users' personal filmed accounts to staff and service users organisation wide	1) Feedback on outcomes of behaviour 2) Social reward 3) Credible source 4) Identification as self as role model 5) Reward (outcome)	1) Education 2,5) Incentivisation 3) Persuasion 4) Enablement	1) Knowledge^ 2) Reinforcement 3^, 4, 5) Social influences	Psychological capability, physical opportunity, automatic motivation
BCTs and MoA evident throughout all stages of EBCD				
Participants attended repeated events throughout the EBCD process, which used and built on collected experiential data to create an understanding about desired behaviours and an intervention to enable those behaviours	1) Satiation 2) Graded tasks 3) Behavioural experiments	1) Environmental restructuring 2, 3) Enablement	1, 2, 3) Reinforcement^	Psychological capability

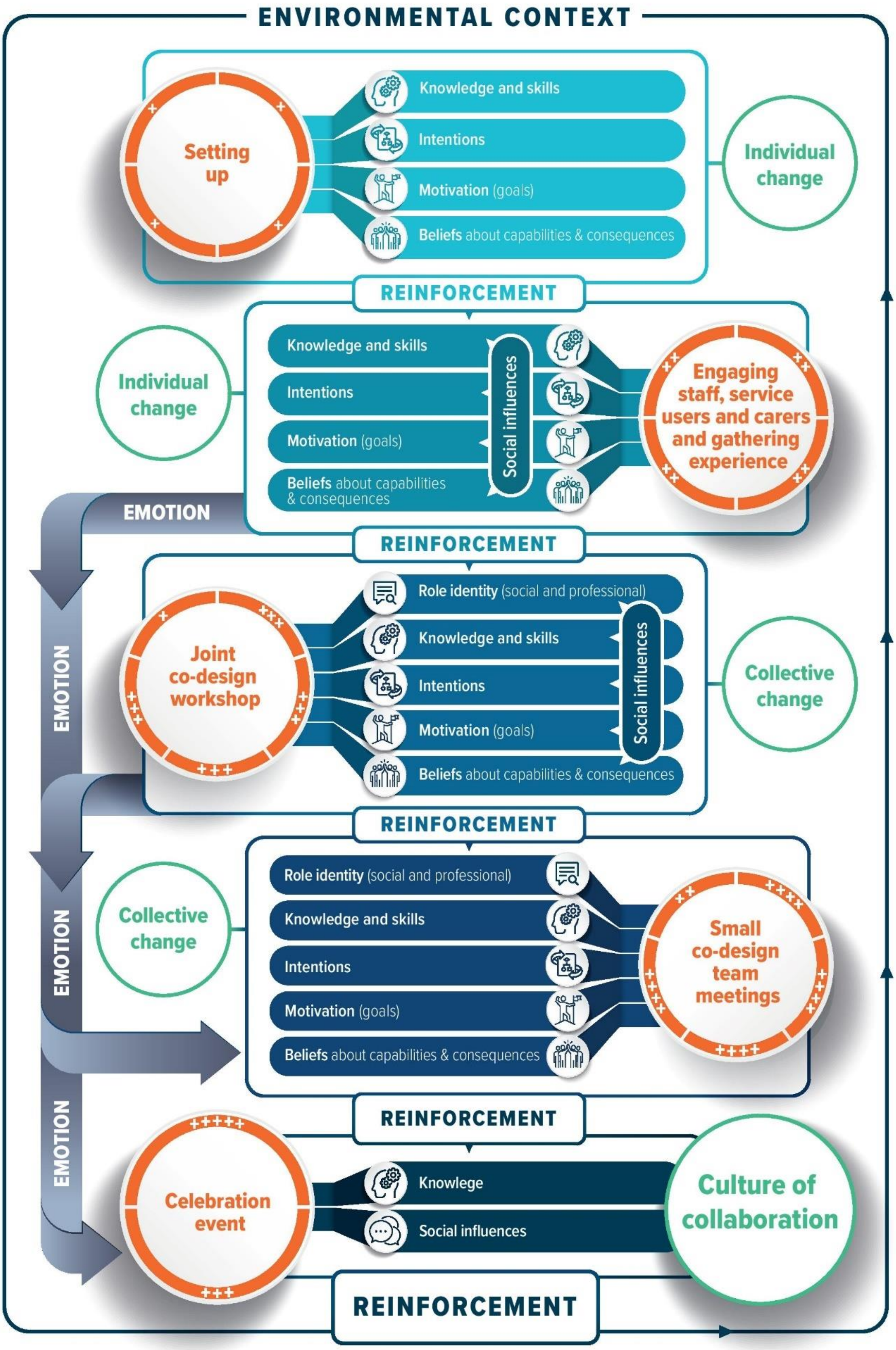
^MoA assigned by authors of the paper

DISCUSSION

Using a behavioural science methodology and triangulation from four data sources, our findings offer a systematic, empirically grounded, and theoretically driven approach to specifying the BCTs and potential mechanisms of action for EBCD employed in an acute mental health inpatient setting. To our knowledge, our study is the first to examine co-design processes through a behaviour change lens and develop a taxonomy of BCTs and mechanisms of action unique to EBCD. There is evidence to suggest that EBCD can positively impact service user, carer and clinician experiences through co-designing and implementing service improvements (10,14,15,34). Our findings add to a growing body of evidence that suggests EBCD processes may support and initiate change in a broader sense through cultural, emotional and relational shifts within the organisation and between individual participants (11,19,35,36). In our study of EBCD on an acute mental health ward, we found 31 BCTs and seven intervention functions that may potentially bring about behavioural change through 11 overarching mechanisms of action. These mechanisms of action were goals, beliefs about consequences, beliefs about capabilities, intentions, social or professional role identity (which all broadly fall under reflective motivation), skills (physical capability), social influences (social opportunity), knowledge (psychological opportunity), environmental context and resources (physical opportunity), reinforcement and emotion (automatic motivation).

Palmer and colleagues (19) developed an explanatory theoretical model of change based on their adapted form of EBCD, called Mental Health Experience Co-design (MH ECO). They identified eight potential mechanisms of change: recognition, dialogue, cooperation, accountability, mobilisation, enactment, creativity and attainment. They argue that these mechanisms do not work in isolation but exist within a complex organisational and social environment, and that change occurs through the interaction of all mechanisms throughout the co-design process. These hypotheses resonate with the findings from our study, where each phase of EBCD saw a complex interaction of mechanisms, which were reinforced throughout the EBCD process, resulting in the potential for behavioural change. This process is depicted in Figure 4 and further described below.

Figure 4 – Behaviour change throughout and within an EBCD process



As Figure 4 depicts, EBCD in the UNITED study initially changed the physical environment within which service users, carers and clinicians normally communicate and interact (environmental context and resources – physical opportunity). All other mechanisms work within this context. In the UNITED study, the physical environment changed from an acute ward, where clinicians were in a position of power, into a neutral conference room, where service users, carers and clinicians were invited to participate on an equal footing due to their expertise in the topic of interest. In the design literature, this mechanism is more broadly defined as "infrastructuring", where situations and materials are purposely designed to facilitate new forms of activity and discussions that achieve specific aims (37).

Service user interests were supported by the trigger film and by employing a lived experience group facilitator (IX) who ensured the service user voice was heard throughout the EBCD process. This enabled clinicians to see service users as partners in bringing about change, rather than just a person who is in their care. It also enabled service users to voice issues in a manner they may not have been able to whilst an inpatient on the ward, thus fostering a culture of shared ideas and collaboration. This began to change the social environment within which service users, carers and staff interacted (social influences). Previous research suggests that such changes to physical and social environments may disrupt traditional clinician-service user roles, particularly when issues relating to power dynamics are deliberately addressed by representing service user interests throughout the participatory process (7,38,39).

During each EBCD stage, participants are encouraged to explore, learn and understand more about their own and others' experiences until they come to a joint understanding of what they wish to achieve together. Using the language of the TDF, the mechanism of action labelled 'goals' most closely matched this process. Goals suggest that an individual may change their behaviour by creating a mental representation of outcomes or end states that they wish to achieve (21). Despite this, we felt that the word 'goals' did not represent the creative, participatory and emergent process of co-design and a more accurate description of this process would be 'reflective motivation' (which is how 'goals' aligns to the COM-B model) (20). Further, although the mechanisms of social influence and environmental context facilitate change in usual working practices, they do not explain the creative outputs that are produced during a co-design process. The design literature suggests that creative outputs such as prototypes or visualisations are used as a way of "building to think" and give permission for participants to explore new behaviours in a low-risk and non-threatening way (37). These are considered a fundamental mechanism of change within co-design processes; however, we were unable to assign language from the TDF or COM-B model that fully represented this process. Such consideration about language should be given when conducting future research that uses behaviour change theory to understand mechanisms of action, particularly when that intervention seeks to facilitate creative or emergent processes.

Within the EBCD process, the mechanisms of action labelled goals (reflective motivation) functions by linking to specific BCTs such as problem solving and goal setting (behaviour) early on within the process. These techniques first encourage individuals to commit to change by taking part in EBCD, before encouraging examination of potential barriers to change and how they may be overcome. As EBCD progresses, change ideas become more detailed through the BCT labelled action planning. Service users, carers and clinicians collectively plan the "what, when and how" until they know what to do to change. These processes all tap into an individual's reflective motivation, which targets processes that involve planning, evaluating and enabling a person to understand what it is they should be doing (20). However, Michie and colleagues suggest that reflective motivation is not in itself sufficient to ensure behaviour change (40), highlighting how other mechanisms must interact to enable real change.

Previous work examining potential mechanisms of EBCD has highlighted the importance of its phased approach (11,19). A phased approach enables individuals to first understand their own experiences and needs (e.g., 27), before bringing individuals together to work towards a joint perspective and plan (e.g., 18). This has been described as a relational transition, where individuals move from a state of "I-them" to "us-we" (19), where different perspectives are used as a common ground to form a shared understanding (41,42). Our work found that this transition was recognised through the BCTs "graded tasks" and "satiation", where repeatedly coming together, first separately as service users and staff, then as a joint service user and staff group, and engaging in tasks that cumulatively built on previous plans, saw desired goals move from the individual to the shared. This repeated exposure to collective sensemaking was also found to increase individual's commitment to change. Thus, EBCD may also work through the mechanism of intentions, which targets an individual's conscious decision to perform a desired behaviour (21). Overall, the phased approach may have a cumulative effect, where each mechanism of action becomes a more powerful agent of change as the EBCD process progresses, as shown by the "+" in Figure 4.

The Theory and Techniques Tool (29) links BCTs with their potential mechanisms of action and was used in this study to identify links between EBCD's BCTs and mechanisms of action. The tool was developed through work that identified 277 intervention articles that described or evaluated a behaviour change intervention linking a BCT to one or more mechanisms of action. Predominantly these interventions addressed physical activity (40%), dietary behaviours (18%), alcohol reduction (10%), and smoking cessation (6%) (32). Our coding found that the Theory and Techniques Tool did not identify any links between the BCTs identified in EBCD and the mechanism of emotion. Emotion relates to "a complex reaction pattern involving experiential, behavioural, and physiological elements" (33), which resonates with EBCD's underpinning theoretical strand of narrative-based approaches to change. Narrative-based approaches to change use storytelling to extract individual experiences which are then used as a vehicle for change (4), thus EBCD was specifically developed to engender an emotional response amongst participants. The observational and questionnaire data suggest that EBCD participants went through an emotional shift during the joint co-design event, as shown in Figure 4. This occurred through watching the trigger film and resulted in open, honest and productive conversations between the service users, carers and clinicians. The specific BCTs assigned to this were discrepancy between current behaviour and goal, information about others' approval, credible source, feedback on behaviour, feedback on outcomes of behaviour, information about health consequences and salience of consequences. These BCTs were linked with mechanisms such as motivation (goals), social influences, knowledge and beliefs about consequences and capabilities. Whist these mechanisms of action were found to be present, the combination of these mechanisms and the BCTs mode of delivery – a film giving first-hand accounts of experiences encountered by service users under the clinicians' care – are likely to culminate in an emotional response that supports and reinforces the other mechanisms and causes an individual to *feel* the need for change, as well as *know* they need to change.

EBCD and other participatory processes are socially based interventions designed to elicit an emotional response within participants (4), however the Theory and Techniques tool was developed from interventions which could be considered more clinically based (32). This may explain why we identified links between BCTs and the mechanism of emotion that was not evident in the Theory and Techniques Tool. It may also explain why certain language, such as goals, was not a good fit to describe EBCD's mechanisms of action. As stated by Michie and colleagues, the human behaviour change project is a work in progress (29), thus our work provides evidence of previously unidentified links between BCTs and mechanisms of action whilst also applying the behaviour change theory to a less commonly investigated social intervention.

Strengths and limitations of the work

Initially, we thought that the EBCD toolkit (7) would encompass most, if not all the BCTs likely to be used within an EBCD process; however, our observational fieldwork led to the identification of the majority of BCTs, with six that were not evident in either the toolkit, the UNITED study protocol or the event questionnaires. This is likely to be because observations enabled a much closer examination of the minutiae of a complex social process, for example revealing specific responses to group discussions and viewing of the trigger film. EBCD is an emergent process with change priorities based around the individual and shared experiences of those involved within the process (4); its outputs are highly contingent on the specific problems or issues that are selected as improvement priorities and how the approach is implemented and facilitated locally. Nonetheless, as described above, there are some BCTs that will likely be evident in all EBCD projects, particularly those that can be linked with the underpinning theoretical strands of EBCD; however, it may not be possible (or useful) to predict all the possible BCTs within any given project due to EBCD's emergent nature.

We found that triangulation of several data sources to investigate the mechanisms behind how EBCD may facilitate change is vital to ensure that potential BCTs and mechanisms of action are not missed. The importance of this has been highlighted in previous studies that have characterised interventions using BCTs and theory (25). The documentary data (EBCD toolkit and UNITED study protocol) did not substantially add to the number of BCTs or intervention content identified through our observational fieldwork. However, triangulation of the four data sources increased our confidence that the intervention description and associated BCTs and mechanisms of action were a comprehensive representation of EBCD within the UNITED study. Whilst the reporting of behaviour change interventions is often criticised for not being sufficient to replicate (43), a strength of this work is that EBCD has been systematically and comprehensively reported in relation to how it may theoretically bring about behaviour change. Using the COM-B model and TDF frameworks has also allowed for the identification of additional mechanisms of action not reported in previous studies of EBCD. This may hold important lessons for those using the approach in the future by improving its implementation and facilitation and ensuring a focus on key BCTs and mechanisms of action.

Although this study identified BCTs and mechanisms of action using four data sources, the empirical data was collected in just one mental health organisation. Mental health settings differ both in relation to other mental health settings (44) and to other healthcare settings, particularly in terms of the dynamics and power relations between service users and service providers (39). These dynamics influence the relational aspects of EBCD (10,11), which may result in BCTs and mechanisms of action being different to that in a general healthcare setting. Much of the work to date that has examined the mechanisms behind EBCD has been conducted in mental health settings (11,19). To understand the full range of potential BCTs and mechanisms of action, future research should focus on examining EBCD in settings other than mental health. These studies should use comprehensive frameworks, such as the BCTTv1 (30) and an adapted Theory and Techniques tool (29) to encourage the use of a shared language and enable comparison between study findings.

Conclusion

This is the first study to use behaviour change theory to develop a taxonomy of BCTs and related mechanisms of action in relation to a participatory design approach as applied in a healthcare context. The study has shown that the approach studied here – EBCD – may work through a complex and interrelated set of mechanisms including motivation (goals), knowledge, skills, intentions, beliefs and social/professional role identities. These mechanisms are reinforced through EBCD's phased approach and the emotional shifts that the mechanisms bring about. This study demonstrates the importance of using more than one data source – and the value of observational fieldwork – when specifying the potential mechanisms of action of participatory approaches to service improvement. This work adds to the theoretical underpinnings of co-design by systematically specifying the details of such approaches and linking them with potential mechanisms of action which both verify and advance previous understandings of co-design processes. This work also contributes to the behaviour change literature by finding previously unidentified links between BCTs and mechanisms of action. Our findings can be used by others as a guide to understand the essential components and mechanisms of action vital to create behaviour change in healthcare settings through participatory design.

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CHAPTER EIGHT: PLANNED EVALUATION OF THE INTERVENTION AND IMPACT OF COVID-19

8.1 Introduction

This chapter first discusses the rationale behind the original proposal to conduct a quasi-experimental, pre-post-test on a control and intervention ward to evaluate the "*Let's Talk*" intervention toolkit. It then presents the pre-test findings. Due to COVID-19 restrictions, access to the Trust was denied by the Research and Development department. Testing of the intervention had to be paused and the post-test data could no longer be collected. With that in mind, the second half of this chapter discusses the work completed during the COVID-19 pandemic and how the results of this study have and will be used in an alternative way to improve the quality of engagement in the mental health Trust where my fieldwork was conducted.

8.2 The original plan for Phase 3

It was originally proposed that in Phase 3 of this study the clinical staff involved in the co-design process would implement the intervention toolkit onto their acute ward. A quasi-experimental, pre-post-test on the intervention and a control ward using structured and unstructured observations and a self-report measure would assess the effectiveness of the intervention. Qualitative interviews with a selection of clinicians and service users on the ward would also be conducted to understand the acceptability of the intervention and enable the co-design team to make modifications if needed. A celebration event would then be held to promote the work to others at the Trust and celebrate the co-design team's successes. A fieldtrip to Melbourne, Australia was also scheduled to discuss postdoctoral plans for a stepped wedge cluster RCT of the intervention with a team in Melbourne who conducted the first RCT of EBCD (see Palmer et al. 2015).

Unfortunately, during the final stage of co-designing *Let's Talk* the global COVID-19 pandemic took place. This caused wide ranging disruption to healthcare services, with a WHO survey reporting that mental health services in 93% of countries worldwide were either disrupted or halted, including the UK (WHO 2020). In the UK, some acute mental health wards were reconfigured to prepare for when and if people contracted COVID-19. There was also a ban on all non-essential visitors to acute mental health wards within CNWL. In addition to this, in March 2020 the NIHR and NOCLOR, the research and development department overseeing my study, announced that all new and existing research studies would be paused to focus instead on COVID-19 research (NIHR 2020). This came just as plans for post-testing were being made.

As the situation with COVID-19 was constantly changing, it was initially thought I may be able to test *Let's Talk* later in the year once the pandemic was under control. During this time, I applied for an extension to the NIHR so I could collect post-test data and go to Australia later in the year. I also focused my efforts on writing up the thesis, publishing papers related to the work and working with NHS England and CNWL to use elements of the work to guide national and local policy (discussed later in this chapter). The aim was to reschedule post-testing to the beginning of summer 2020. By the beginning of summer, it was becoming clear that the pandemic may be a longer-term issue – non-essential visitors were still not allowed onto the acute wards and restrictions and social distancing rules were enforced nationally by the UK Government (Cabinet Office 2020). I contacted NOCLOR at the end of April to enquire when I may be able to restart my study. By the end of summer 2020, NOCLOR had implemented a process for assessing the viability of study restarts. Studies were prioritised as follows:

1) Urgent public health
2) Urgent treatment / intervention
3) Non-urgent portfolio studies
4) Non-portfolio studies (including doctoral studies)

Although my study was a portfolio study due to my NIHR funding, because it was in the context of doctoral work, that meant I had the lowest priority for restart, and at the time of writing this thesis (March 2021), doctoral studies have still not been authorised to restart. Due to this, I was no longer able to conduct the post-testing phase of the work.

Pre-test data on a control and intervention ward had been collected in April – June 2019. This chapter will now describe the methods and results of the original plan, then describe the changes I made after the COVID-19 pandemic prevented my being able to conduct the post test data collection.

8.3 Phase 3 methods

8.3.1 Aims and objectives

The overarching aims of Phase 3 were to:

1) Conduct a pre-post-test on a control and intervention ward to:
    a. Examine the amount and quality of nurse-patient therapeutic engagement using a structured observation tool (Tyson et al. 1995)
    b. Examine patient reported perceptions of care using the Views on Inpatient Care (VOICE) questionnaire (Evans et al. 2012)
2) Assess the acceptability of the intervention toolkit by conducting semi-structured interviews with a selection of nurses and service users and modify where necessary
3) Make plans for postdoctoral work during a fieldtrip to Australia

8.3.2 Rationale for the quasi-experimental design

Randomised controlled trials (RCTs) are considered the gold standard approach for evaluating intervention effectiveness (Hariton & Locascio 2018). However, trials can be prohibitively expensive and time consuming and even well designed RCTs can be susceptible to biases, particularly when generalising results to “real world” settings (Kontopantelis et al. 2015). Observational studies can address some of these limitations, in particular, quasi-experimental designs such as pre-post-tests can evaluate the association between an intervention and an outcome without randomly assigning the intervention and at a fraction of the cost and time that may make an RCT unfeasible (Harris et al. 2006). As I am a lone researcher conducting this study as part of a three-year PhD project on one mental health ward, an RCT design was considered unfeasible within the study’s timeframe and premature at this stage of the research process. As recommended by the MRC Framework, interventions must undergo several rounds of modelling before a feasibility, then definitive RCT can be conducted (Craig et al. 2008). Therefore, at this stage of intervention development, the quasi-experimental design would enable the intervention toolkit to be tested and potentially further refined before considering a feasibility, then definitive RCT at postdoctoral level.

The biggest disadvantage of a pre-post-test design is that randomisation is not used, which may introduce a number of potential biases such as maturation bias, regression to the mean, historical bias, instrumentation bias, and the Hawthorne effect (Shadish et al. 2002). Additionally, pre-post-test designs limit the study’s ability to make causal associations between an intervention and an outcome (Schweizer et al. 2016). Researchers must be aware of these limitations and implement measures to overcome them. A major consideration is the addition of a control group that does not receive the intervention (Schweizer et al. 2016). This can address historical bias and if an effect is seen in the intervention group but not the control group then causal inference is strengthened (Shadish et al. 2002). As such, an acute ward with similar staff and patient types that offered an identical service within the same mental health unit was included as a control group within the planned pre-post-test design.

8.3.3 Ethics

The study received NHS Research Ethics approval from the London Fulham Research Ethics Committee (reference: 18/LO/2193) at the same time as gaining approval for the previous phases of the work.

8.3.4 Eligibility criteria

8.3.4.1 Ward observations:

- Any mental health nurse, health care assistant or service user on the control or intervention ward at the time of observation
- Nurses or service users who opt out will not be observed

8.3.4.2 Questionnaires:

- Service users who were admitted to the control or intervention ward
- Had been on the wards for a minimum of seven days (based on studies using the same methods in mental health settings e.g., Wykes et al. 2018)
- Aged 18+
- Able to provide informed consent
- Had sufficient ability to speak and understand English

8.3.4.3 Semi-structured interviews:

- Any mental health nurse or health care assistant who had used or had taken part in co-designing the “Let’s Talk” intervention toolkit
- Any service user on the intervention ward who had used the *“Let’s Talk”* intervention toolkit
- Aged 18+

- Able to provide informed consent
- Had sufficient ability to speak and understand English

8.3.5 Sample and setting

To gain site access informal meetings with the clinical service lead and informal presentations at the Trust's operations meeting enabled the identification of two acute mental health wards that were enthusiastic about taking part in the study. Discussions with both ward managers enabled us to choose one intervention ward (who were involved in the co-design of the intervention as well as the pre-post-test) and one control ward (who were only involved in the pre-post-test and did not take part in the co-design process or receive the intervention).

The intervention ward is an 18 bedded, purpose-built, mixed sex acute mental health ward. People are admitted directly onto the ward and suffer from an array of serious mental health problems, including schizophrenia, bipolar disorder, depression and personality disorders. The ratio of nursing staff to patients is 4:18 (2 mental health nurses, 2 HCAs). The ward also has a consultant psychiatrist, 2 specialist registrars, a peer support worker, an occupational therapist and an activities coordinator. The control ward is also an 18 bedded, purpose-built, mixed sex acute mental health ward that directly admits people with similar mental health problems as the intervention ward. The staff to patient ratio and staffing complement are the same as the intervention ward. Once the wards were chosen, more detailed information was presented to the staff and service users so they could understand the purpose of the study and decide whether they wanted to participate.

8.3.5.1 Observations:

The observation sample was the whole population of nurses, HCAs and service users on the control and intervention ward at the time of observation. As the purpose of observations was to gather information on overall ward activity rather than data on specific staff or specific service users, observations were on an opt out basis, thus no individual consent was obtained for the observational data. If an individual was unhappy about being part of the observations, they could alert me, or the nursing staff and they would not be included in the observations. Information about this was provided to clinicians and service users in the following ways:

1) Presentation to staff at the beginning of staff meetings to explain the purpose of the observations and give the option to opt out
2) Presentation to service users on the ward during community meetings to explain the purpose of the observations and give the option to opt out
3) Posters in communal areas on the ward, to explain the purpose of the observations and give the option to opt out (see Appendix E1 for copy of poster)

8.3.5.2 Questionnaire:

On the control and intervention wards I aimed to survey a whole population sample of service users, looking specifically at their perceptions of inpatient care. Information about this was provided in the same ways as for the observations. Consent was implied on completion of the questionnaire.

8.3.5.3 Semi structured exit interviews:

To establish the acceptability of the intervention a whole population sample, derived from clinicians and service users who used the *"Let's Talk"* intervention toolkit on the intervention ward were intended to be invited to take part in the exit interviews. Due to COVID-19 these interviews were not possible.

8.3.6 Study instruments

8.3.6.1 Observational tool:

The initial plan was to use behavioural mapping techniques to evaluate the impact of the intervention on the amount and type of nurse-patient engagement. In behavioural mapping researchers observe and record pre-determined behaviours at set times (e.g., Askim et al. 2014). There have been no previous studies that used this approach in a mental health inpatient setting, therefore an approach successfully used to measure therapeutic activities in the Collaborative Rehabilitation Environments in Acute sTrokE (CREATE) study (Jones et al. 2016) was considered. This was thought appropriate as the CREATE study used EBCD to develop and implement interventions to increase therapeutic activities in acute stroke units, thus employing similar methods and area of investigation to my study. Following discussions with the CREATE team, it was decided this would no longer be a feasible option for evaluating our intervention. The ward layout and patient presentation on stroke wards is different to that of an acute mental health ward. The CREATE team observed 10 patients per day in one-minute intervals. This was feasible on a stroke ward as stroke patients are often not mobile and remain in one place for long periods of time. In contrast and based on my experience as a mental health nurse, acute mental health wards are busy, fast-paced environments with clinicians and service users often moving around the ward. Due to this it was thought the behavioural mapping would not allow for accurate readings of nurse or service user interaction. Past research has shown that the quality of therapeutic engagement is one of the most important aspects of inpatient care (Johansson & Eklund 2003) and has a direct influence on service users' and nurses' experiences and satisfaction of care, despite engagement levels being low (Gilburt et al. 2008, Moreno-Poyato et al. 2018). Therefore, in addition to measuring the type and amount of engagement, it was important to understand whether our intervention helped nurses to change their behaviours in ways that would positively impact on the quality of nurse-patient engagement. As such, I further investigated tools that could measure quality as well as amount and type of engagement.

As a result, an observational tool by Tyson and colleagues (1995) was selected as the primary outcome measure to examine changes in nurses' behaviour that may lead to improvements in the amount, type and quality of nurse-patient engagement. This tool has been found to have high inter-rater reliability (Tyson et al. 1995) and has been previously used in acute mental health settings (e.g., Sanson-Fisher et al. 1979, Sandford et al. 1990, Tyson et al. 1995). Observations are conducted by one non-participant observer, in 5-minute intervals over the duration of a nursing shift, for 10 shifts. They begin with the first nurse encountered and continue until all nursing staff have been observed. During the observation period, the observer manually codes interactions into one of seven nurse behaviour categories:

1) Interactive behaviour (positive, negative, neutral)
    - audible word(s) emitted towards one other person
2) Individual non-verbal (positive, negative, neutral)
    - staff attending to one other person and exhibiting any of the following: eye-contact, posture turned towards other, head movements, gestures, physical contact, including administering an injection, restraining patient, dressing or bathing patient
3) Group verbal (positive, negative, neutral)
    - audible word(s) emitted to more than one person with shift of gaze from person to person within a 5-second period
4) Group non-verbal (positive, negative, neutral)

    - attending behaviours described above directed to more than one person in a 5-second period

5) Ignoring patient (inappropriate, appropriate, appropriate cannot be judged)
    - no response to patient's behaviour despite being within 1 metre of patient. Includes missing opportunity to respond and deliberately ignoring it
6) Solitary task
    - any on-task behaviour carried out independently of others, e.g., reading. writing. talking on phone, cleaning, walking, etc.
7) Other
    - includes all behaviours which do not fall into the above categories. e.g., conversing with other staff, absent from ward

Number one to four of these behavioural categories are split into subcategories to ascertain the quality of the nurse-patient interaction (see Appendix B1.1 for example of observation record sheet):

1) Positive
    - praise, compliments, positive feedback, laughter, smile, friendly gestures, positive physical contact
2) Negative
    - reprimand, derogatory remark, discouragement, negative feedback, frowns, grimaces, negative gestures, negative physical contact
3) Neutral
    - neither positive nor negative

After piloting the tool on the intervention ward, it was decided that there was still too much movement and activity around the ward to accurately observe and record the quality of all nurse-patient interactions and behaviours in five-minute intervals. Other observation tools that assessed quality of interactions in residential units for the elderly used 15-minute intervals (Dean et al. 1993). Thus, the decision was made to adapt the current tool from five-minute intervals to 15-minute intervals. This enabled me to observe and record each nurse's interactions and consider and record contextual information about the interaction, thus strengthening the overall understanding of nurse-patient interactions on the two wards.

8.3.6.2 Questionnaire:

As the study's aim was to improve services for both clinicians and service users, it was important to include a measure that directly examined how service users perceived the quality of inpatient care pre and post testing. With this in mind, the primary outcome for service users was service users' perception of the quality of therapeutic contact and care. The Views on Inpatient Care (VOICE) (Evans et al. 2012) questionnaire was used to measure perceptions of inpatient care.

VOICE is a 19- item self-report measure, that assesses service users' perceptions of inpatient care, including areas such as care and treatment, therapy and activities and clinician-patient interactions. VOICE was developed by service-users using participatory research methods; therefore, it encompasses the issues that are most important to service-users, and is in keeping with this study's participatory, service user led design. VOICE has high face validity, high internal consistency (a=0.92) and high test-retest reliability (p=0.88, CI=0.81-0.95) with service users saying it is easy to understand and complete (Evans et al. 2012). This makes it suitable for use by people who are admitted to hospital. Further, it has been used successfully in previous studies on acute mental health wards (e.g., Simpson et al. 2017, Wykes et al. 2018). Individual items range from 1 – strongly agree to 6 – strongly disagree. VOICE collates an overall total score, ranging from 19 – 114, where higher is a worse perception of the quality of inpatient care.

8.3.7 Procedure

8.3.7.1 Observations:

Participant recruitment into the observations has previously been described in Chapter 5. The pre-test observations were conducted in May – July 2019. Spacing the 10 observation days on each ward into a three-month period ensured a representative sample of interactions was captured. It was also important to conduct the pre-test observations before the co-design work began in October 2019, as being involved in this work may cause the staff to alter their behaviour and bias the results, as discussed in Chapter 7. In total, 80 hours of non-participant observations were conducted on the control and 80 hours on the intervention ward. Observations were conducted between the hours of 0730-1500 or 1330-2130 Monday through Sunday. Discussion with the ward manager highlighted these as the times that most nurse-patient engagement would occur. Similarly, observations were not conducted during night shifts as most service users were asleep and nurse-patient engagement was minimal. Observations were recorded in real time, using a tablet device. At the beginning of the day before each observation I asked the staff whether anybody had chosen to opt out. If a person had opted out, they would remain out of the study until they opted back in again. There were no requests from staff to opt out.

8.3.7.2 Questionnaire:

Through my NIHR fellowship, I was granted access to the services of the North West London Clinical Research Network (CRN). The CRN research staff worked with me and the ward staff to distribute information sheets (Appendix E2) and identify suitable service users to complete the questionnaires. The pre-test questionnaire data was collected in May – September 2019. As with the observational data, it was important to collect the questionnaire data before the intervention ward staff were involved in the co-design work beginning in October 2019.

Staff from the participating wards were asked to identify service users who had been on the ward for at least seven days and who had capacity to complete the questionnaire. The CRN research staff then approached the identified service users, provided them with written and verbal information about the study and answered any questions. The CRN research staff assessed the service users' capacity to understand the information and make an informed choice about participation. Once capacity had been established, the research staff gave each service user a questionnaire to complete and offered support if required.

8.3.8 Data analysis

8.3.8.1 Observations

Quantitative data from the pre-test observations and questionnaires were entered into SPSS and checked and cleaned by the faculty statistician before analysis. Due to the categorical nature of the measurements, the data was summarised by the number and percentage of individual measurements in each behavioural category. Descriptive statistics were calculated based on the main categories of behaviour and their related sub-categories to examine:

1) The percentage of each behavioural category within and between the control and intervention ward and within staff type
2) The quality of nurse-patient interactions within and between the control and intervention ward and within staff type

3) Comparison of the pre-test and post-test data within and between control and intervention wards to highlight changes in nurses' behaviour and improvements (or lack thereof) in amount and/or quality of therapeutic engagement (this final analysis could not be conducted due to the inability to collect post-test data because of COVID-19)

8.3.8.2 Questionnaires

Data from the pre-test questionnaires were entered into SPSS and checked and cleaned by the faculty statistician before analysis. As this was just a preliminary evaluation to test the intervention, establish the acceptability and examine changes on just one ward randomisation was not possible, thus the data was analysed through descriptive statistics only (Shadish et al. 2002). Descriptive statistics were calculated based on:

1) Total VOICE score on control and intervention ward pre test
2) Total VOICE score on control and intervention ward post test
3) Compare pre and post test scores within and between ward (post-test comparisons could not be conducted due to COVID-19)

In addition to the observations and questionnaires, feasibility data such as recruitment levels and ease and accuracy of using the data measurement tools was recorded. Results from the pre-test data are presented below.

8.4 Results of the pre-test measures

8.4.1 Observation results

The first analysis considered just the main category of nurse behaviour. A summary of the responses is shown in Table 12. The figures are presented for the control and intervention ward separately, and for both wards combined. The figures are the number of observations in each category, along with the percentage of responses.

Table 12 – Summary of responses in the main behaviour categories

Category	**Control Number (%)**	**Intervention Number (%)**	**All Number (%)**
Interactive behaviour	369 (23.1%)	333 (23.0%)	702 (23.0%)
Individual non-verbal	26 (1.6%)	22 (1.5%)	48 (1.6%)
Group verbal	16 (1.0%)	2 (0.1%)	18 (0.6%)
Group non-verbal	0 (0.0%)	0 (0.0%)	0 (0.0%)
Ignoring patient	38 (2.4%)	11 (0.8)	49 (1.6%)
Solitary task oriented	552 (34.5%)	478 (33.0%)	1030 (33.8%)
Other	598 (37.4%)	604 (41.7%)	1202 (39.4%)

The results suggest that the most commonly observed behaviour was the 'other' category, which included clinician-clinician interaction and off ward activities such as when staff were on their meal breaks. This was closely followed by solitary task-oriented behaviours which included computer or administrative work. Almost 40% of all observations were in the 'other' category, with approximately a third (34%) in the solitary task-oriented category. Almost a quarter of all observations (23%) were found to be interactive behaviour. Only a small number of responses were in the individual non-verbal, group verbal and ignoring patient categories (<2% for all categories). There were no responses observed in the group non-verbal category for either wards. The pattern of nurses' behaviour was fairly similar between the intervention and control ward.

In addition to the behavioural categorisation, the number of responses in each subcategory were summarised. This examined the quality of the interactions between service users and nurses, with results shown in Table 13. For each of the wards, the first figures are the number of observations in each subcategory, along with the percentage of all observations. In addition, the percentage of observations within each subcategory as a percentage of response in each main category are shown.

Table 13 – Summary of responses in the main behaviour categories and behaviour sub-categories

Category	Subcategory	Control		Intervention		All	
		N (%)	% within category	N (%)	% within category	N (%)	% within category
Interactive behaviour	Positive	113 (7.1%)	30.6%	91 (6.3%)	27.3%	204 (6.7%)	29.1%
	Negative	20 (1.3%)	5.4%	13 (0.9%)	3.9%	33 (1.1%)	4.7%
	Neutral	236 (14.8%)	64.0%	229 (15.8%)	68.9%	465 (15.3%)	66.2%
Individual non-verbal	Positive	6 (1.6%)	23.1%	10 (0.7%)	45.5%	16 (0.5%)	33.3%
	Negative	0 (0.0%)	0.0%	0 (0.0%)	0.0%	0 (0.0%)	0.0%
	Neutral	20 (1.3%)	76.9%	12 (0.8%)	54.5%	32 (1.1%)	66.7%
Group verbal	Positive	0 (0.0%)	0.0%	2 (0.1%)	100.0%	2 (0.1%)	11.1%
	Negative	0 (0.0%)	0.0%	0 (0.0%)	0.0%	0 (0.0%)	0.0%
	Neutral	16 (1.0%)	100.0%	0 (0.0%)	0.0%	16 (0.5%)	89.9%
Group non-verbal	Positive	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-
	Negative	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-
	Neutral	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-
Ignoring patient	Inappropriate	38 (2.4%)	100.0%	10 (0.7%)	90.9%	48 (1.6%)	98.0%
	Appropriate	0 (0.0%)	0.0%	0 (0.0%)	0.0%	0 (0.0%)	0.0%
	Not judged	0 (0.0%)	0.0%	1 (0.1%)	9.9%	1 (<0.1%)	2.0%
Solitary task oriented	-	552 (34.5%)	-	478 (33.0%)	-	1030 (33.8%)	-
Other	-	598 (37.4%)	-	604 (41.7)	-	1202 (39.4%)	-

The results suggest that almost all observed nurse-patient interactions were either positive or neutral. In the interactive behaviour category just over two-thirds of the responses were deemed neutral on the intervention ward and just under two-thirds were deemed neutral on the control ward. 27% of responses on the intervention ward and 31% of responses on the control ward were positive. Less than 5% of all responses within this category were negative. For the individual non-verbal category on the intervention ward, positive and neutral interactions were almost equal, whereas on the control ward 77% of responses were neutral and 23% were positive. When ignoring a patient was observed, in almost all instances (98%) this observation was deemed inappropriate. There were no instances of appropriately ignoring a patient.

A third analysis was conducted that considered four distinct healthcare professional categories: registered mental health nurses (RMN), healthcare assistants (HCA), night shift clinicians (who were on duty for the first half an hour of a day shift, whilst the night staff handed over to the day staff) and student nurses on both the intervention and control wards. There was also a peer support worker category, however this was removed from the analysis as there was only one peer support worker per ward, meaning the data would be identifiable to one individual, thus breaching confidentiality agreements. Initially just the main categories of behaviour were considered. A summary of the responses for each of the healthcare professional categories is shown in Table 14 (control ward) and Table 15 (intervention ward). The figures are the number of observations in each category, along with the percentage of responses.

Table 14 – Control ward summary of responses in the main behaviour categories

Category	RMN N (%)	HCA N (%)	Night shift N (%)	Student N (%)
Interactive behaviour	178 (26.5%)	130 (23.0%)	4 (12.5%)	42 (17.3%)
Individual non-verbal	4 (0.6%)	19 (3.4%)	0 (0.0%)	0 (0.0%)
Group verbal	8 (1.2%)	8 (1.4%)	0 (0.0%)	0 (0.0%)
Group non-verbal	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Ignoring patient	6 (0.9%)	29 (5.1%)	0 (0.0%)	3 (1.2%)
Solitary task oriented	222 (33.0%)	207 (36.6%)	12 (37.5%)	92 (37.9%)
Other	254 (37.8%)	173 (30.6%)	16 (50.0%)	106 (43.6%)

Table 15 – Intervention ward summary of responses in the main behaviour categories

Category	RMN N (%)	HCA N (%)	Night shift N (%)	Student N (%)
Interactive behaviour	152 (23.0%)	133 (23.6%)	12 (20.0%)	30 (20.8%)
Individual non-verbal	4 (0.6%)	14 (2.5%)	0 (0.0%)	4 (2.8%)
Group verbal	0 (0.0%)	1 (0.2%)	0 (0.0%)	0 (0.0%)
Group non-verbal	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Ignoring patient	5 (0.8%)	6 (1.1%)	0 (0.0%)	0 (0.0%)
Solitary task oriented	195 (29.5%)	235 (41.7%)	15 (25.0%)	30 (20.8%)
Other	306 (46.2%)	175 (31.0%)	33 (55.0%)	80 (55.6%)

The Chi-square test was used to compare the response distribution between the RMN and HCA categories. This suggested that the difference between them was highly statistically significant (p<0.001). Of interest is that the RMNs were involved in more patient interactive behaviours than the HCAs and student nurses. The summaries suggest that the HCAs had more solitary task orientated observations, but fewer "other" observations than the RMNs, which included tasks such as speaking to other professionals.

A formal comparison was again made between the RMN and HCA categories, which again suggested a highly significant difference between these two categories (p<0.001). As in the earlier analysis, the HCAs had more solitary task orientated observations, but fewer "other" observations than the RMNs, which includes tasks such as speaking to other professionals. Of interest is that the RMNs were involved in more patient interactive behaviours than the student nurses.

The quality of nurse-patient interactions between RMNs and HCAs were examined (Table 16 control ward and Table 17 intervention ward). In addition to the main response categorisation, the number of responses in each subcategory were summarised for each healthcare professional category. This information is shown in Table 18 (control ward) and Table 19 (intervention ward) at the end of this section.

Table 16 – Control ward quality of nurse-patient interactions by rank

Rank	Positive (%)	Negative (%)	Neutral (%)
RMN	61 (32.1%)	5 (2.6%)	124 (65.3%)
HCA	27 (17.2%)	15 (9.6%)	115 (73.2%)

Table 17 – Intervention ward quality of nurse-patient interactions by rank

Rank	Positive (%)	Negative (%)	Neutral (%)
RMN	39 (25%)	7 (4.5%)	110 (70.5%)
HCA	45 (30.4%)	4 (2.7%)	99 (66.9%)

Table 18 – Quality of nurse-patient interaction in the main behaviour categories on the control ward

Category	Sub category	RMN		HCA		Night Shift		Student	
		N (%)	% within category	N (%)	% within category	N (%)	% within category	N (%)	% within category
Interactive behaviour	Positive	59 (8.8%)	33.2%	23 (4.1%)	17.7%	0 (0.0%)	0.0%	23 (9.5%)	54.8%
	Negative	5 (0.7%)	2.8%	15 (2.7%)	11.5%	0 (0.0%)	0.0%	0 (0.0%)	0.0%
	Neutral	114 (17.0%)	64.0%	92 (16.3%)	70.8%	4 (12.5%)	100%	19 (7.8%)	45.2%
Individual non-verbal	Positive	2 (0.3%)	50.0%	4 (0.7%)	21.1%	0 (0.0%)	-	0 (0.0%)	-
	Negative	0 (0.0%)	0.0%	0 (0.0%)	0.0%	0 (0.0%)	-	0 (0.0%)	-
	Neutral	2 (0.3%)	50.0%	15 (2.7%)	78.9%	0 (0.0%)	-	0 (0.0%)	-
Group verbal	Positive	0 (0.0%)	0.0%	0 (0.0%)	0.0%	0 (0.0%)	-	0 (0.0%)	-
	Negative	0 (0.0%)	0.0%	0 (0.0%)	0.0%	0 (0.0%)	-	0 (0.0%)	-
	Neutral	8 (1.2%)	100%	8 (1.4%)	100%	0 (0.0%)	-	0 (0.0%)	-
Group non-verbal	Positive	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-
	Negative	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-
	Neutral	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-
Ignoring patient	Inappropriate	6 (0.8%)	100%	29 (2.1%)	100%	0 (0.0%)	-	3 (1.2%)	100.0%
	Appropriate	0 (0.0%)	0.0%	0 (0.0%)	0.0%	0 (0.0%)	-	0 (0.0%)	0.0%
	Not judged	0 (0.0%)	0.0%	0 (0.0%)	0.0%	0 (0.0%)	-	0 (0.0%)	0.0%
Solitary task	-	222 (33.0%)	-	207 (36.1%)	-	12 (37.5%)	-	92 (37.9%)	-
Other	-	254 (37.8%)	-	173 (30.6%)	-	16 (50.0%)	-	106 (43.6%)	-

Table 19 – Quality of nurse-patient interaction in the main behaviour categories on the intervention ward

Category	**Sub category**	**RMN**		**HCA**		**Night Shift**		**Student**	
		N (%)	**% within category**	**N (%)**	**% within category**	**N (%)**	**% within category**	**N (%)**	**% within category**
Interactive behaviour	Positive	37 (5.6%)	24.3%	40 (7.1%)	30.1%	0 (0.0%)	0.0%	10 (6.9%)	33.3%
	Negative	7 (1.1%)	4.6%	4 (0.7%)	3.0%	2 (3.3%)	16.7%	0 (0.0%)	0.0%
	Neutral	108 (16.3%)	71.1%	89 (15.8%)	66.9%	10 (16.7%)	83.3%	20 (13.9%)	66.7%
Individual non-verbal	Positive	2 (0.3%)	50.0%	4 (0.7%)	28.6%	0 (0.0%)	-	4 (2.8%)	100%
	Negative	0 (0.0%)	0.0%	0 (0.0%)	0.0%	0 (0.0%)	-	0 (0.0%)	0.0%
	Neutral	2 (0.3%)	50.0%	10 (1.7%)	71.4%	0 (0.0%)	-	0 (0.0%)	0.0%
Group verbal	Positive	0 (0.0%)	-	1 (0.2%)	100%	0 (0.0%)	-	0 (0.0%)	-
	Negative	0 (0.0%)	-	0 (0.0%)	0.0%	0 (0.0%)	-	0 (0.0%)	-
	Neutral	0 (1.0%)	-	0 (0.0%)	0.0%	0 (0.0%)	-	0 (0.0%)	-
Group non-verbal	Positive	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-
	Negative	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-
	Neutral	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-	0 (0.0%)	-
Ignoring patient	Inappropriate	4 (0.6%)	80.0%	6 (1.1%)	100%	0 (0.0%)	-	0 (0.0%)	-
	Appropriate	0 (0.0%)	0.0%	0 (0.0%)	0.0%	0 (0.0%)	-	0 (0.0%)	-
	Not judged	1 (0.2%)	20.0%	0 (0.0%)	0.0%	0 (0.0%)	-	0 (0.0%)	-
Solitary task	-	195 (29.5%)	-	235 (41.7%)	-	15 (25.0%)	-	30 (20.8%)	-
Other	-	306 (46.2%)	-	175 (31.0%)	-	33 (55.0%)	-	80 (55.6%)	-

8.4.2 Discussion of the observations in the wider literature

On average, on both wards, nurses' time was divided almost equally between interactive behaviour, solitary task orientated behaviour and "other", which included clinician-clinician interaction and off ward activities such as meal breaks. On both wards nurse-patient interaction averaged around 25%. This is similar to other contemporary studies that have examined nurse-patient interactions on acute mental health wards (Goulter et al. 2015, McAllister & McCrae 2017), yet considerably lower than less contemporary studies (Ryrie et al. 1998, Whittington & McLaughlin 2000), where a review found that the average amount of nurse-patient interaction was around 50% (Sharac et al. 2010). This indicates that overtime, nurse-patient interactions may be decreasing and reflects the concerns that increasing bureaucracy required from staff may be impeding engagement levels (McAllister & McCrae 2017). It may also be due to the lack of a standard measure of nurse-patient interaction. Whatever the reason, research suggests that direct, face-to-face nursing care should account for a majority of nurses' time (Sanson-Fisher et al. 1979), thus an intervention to improve engagement is clearly indicated.

The quality of nurse-patient interactions was also recorded as either positive, negative or neutral. A particularly encouraging finding was that on both wards the majority of interactions were either positive or neutral, which is in line with other studies that have used the same measure (Sanson-Fisher et al. 1979, Sandford et al. 1990, Tyson et al. 1995). Incidences of negative behaviour were low; however, it is important to examine this in more detail due to the serious implications this may have on service users. Twenty incidences (1.3%) of negative behaviour were observed on the control ward and 13 incidences (0.9%) on the intervention ward, all occurring in the interactive behaviour category. On the intervention ward, the cases of negative behaviour were isolated to two specific days, which may be an indication that the clinicians were particularly under pressure on those days. On the control ward the majority of negative behaviour was isolated to one incident within a 15-minute observation period, which may indicate a temporary lapse of judgement by the nurses, rather than an ingrained culture of poor patient care, or it may indicate that the clinicians were aware that they were being observed (discussed further at the end of this section). It is important to note that while the negative category included abusive behaviour such as physical violence or swearing at a service user, it also included behaviour such as frowning or nurses giving an abrupt response. In all incidences of negative behaviour, there was nothing that could be considered abusive.

Qualitative observations reported in Chapter 5, paper 2 conducted alongside this quantitative measure, did not identify any abusive behaviour (McAllister et al. 2021a). Most negative interactions were due to a nurse giving an abrupt reply or not taking the time to properly consider service users' concerns or requests. Although there are many service users' reports that describe nursing care as coercive (Cutcliffe et al. 2015), abusive incidents are generally a rare event. Despite this, coercive, abusive care may leave a strong and long-lasting negative impact on a service user (Rose et al. 2015). For individuals who experience or witness even one such incident, the negative impact may be so strong that this will be their overarching memory of the care they received. Equally, service users may also construe neutral behaviours as an indication that therapeutic engagement is poor quality, or that nurses do not care for them. Neutral behaviours comprised the majority of nurse-patient interactions on both the control and intervention ward. Thus, it would be important to see a significant increase in the number of positive interactions on the intervention ward in the post-test data to claim that the intervention may improve the quality of therapeutic engagement.

In discussing nurse-patient interactions in the context of therapeutic engagement it is important to make a distinction between interactions that have an intended therapeutic purpose and interactions that are more instrumental, or task orientated. Several studies have explored the type of contact that nurses have with service users and all have found that activities considered therapeutic occurred much less frequently than instrumental, task orientated interactions (Whittington & McLaughlin 2000, Bee et al. 2006, McAllister & McCrae 2017). One major limitation of the measurement tool was that it did not allow for the nuances of interaction to be recorded. Despite this, it could be argued that neutral interactions are unlikely to be therapeutic in nature. Qualitative findings reported in Chapter 5, paper 2, showed that a majority of nurse-patient interactions were observed to be short in nature, often responding to a service users' immediate, task-oriented request e.g., charging their mobile phone, or making a cup of coffee (McAllister et al. 2019a). Whilst the service users appeared to appreciate these interactions as their immediate needs were satisfied, the interactions were transactional in nature, and rarely did a nurse and service user discuss issues related to an individual's mental health, wellbeing or future plans post discharge. This further supports the need to develop structured interventions that increase meaningful nurse-patient interactions, such as that provided by the *Let's Talk* intervention.

It is not surprising that solitary task orientated behaviour, which included tasks such as administration and documentation, was reported in the top three nursing behaviours. It has been suggested that advancements in technology may improve this (Goulter et al. 2015), however there was significant duplication in documentation, where a computer-based system required nurses to record patient progress notes and handover information each shift, often resulting in the same information being recorded twice. Of interest was that just two group interactions were observed on the intervention ward and just 16 on the control ward. One may have expected more group interactions, particularly with the introduction of ward planning and community meetings on many acute mental health wards in the UK (Novakovic et al. 2010). It may be that this did occur, but outside of the observation period, however it also highlights the longstanding issue that nurses do not have time to engage with service users in important group activities that have been shown to improve the quality of patient care (Foye et al. 2020).

The similarity in findings between the control and intervention ward indicates that nursing practice and care may not differ greatly between the two wards. This suggests they would be a suitable match to compare data pre and post intervention implementation, as the reliability of this data is dependent on the control and intervention ward delivering care to similar standards (Harris et al. 2006). It could be suggested that some of the positive results may be due to the Hawthorne effect whereby behaviour of those observed changes due to their awareness of being watched (Boyce 2011); however, the observation period spanned three months, thus it would be challenging for staff to control their behaviour consistently for such an extended period of time. In future studies it would be useful to employ lived experience researchers to conduct the observations, as although the measure was designed to be objective, subjective decisions on whether a behaviour constituted positive, negative or neutral had to be made. Having lived experience of receiving care on a mental health ward may either positively or negatively impact on those decisions.

8.4.3 VOICE questionnaire results

Participant characteristics

In total, 29 questionnaires were completed by service users on the intervention ward and 31 questionnaires were completed by service users on the control ward. Details of the participants' demographic characteristics can be found in Table 20.

Table 20 – Demographic characteristics for service users on control and intervention ward

	Intervention ward	**Control ward**
Variable	n (%)	n (%)
Gender		
Female	19 (65.5)	19 (61)
Male	10 (34)	12 (39)
Age (years)		
18-24	4 (14)	2 (6)
25-34	5 (17)	7 (22.5)
35-44	5 (17)	6 (19)
45-54	9 (35)	8 (26)
55-64	5 (17)	6 (19)
65+	1 (3)	1 (3)
Ethnicity		
White	12 (41)	9 (29)
Mixed	3 (10)	5 (16)
Asian	2 (6)	3 (10)
Black	7 (24)	9 (29)
Other	4 (14)	5 (16)
Legal status of admission		
Involuntary	16 (55)	20 (64.5)
Voluntary	12 (41)	10 (32)
Primary clinical diagnosis		
Psychosis	8 (27)	6 (19)
Personality disorder	0 (0)	2 (6)
Bipolar affective disorder	5 (17)	8 (26)
Depression	7 (24)	2 (6)
More than one diagnosis	4 (14)	2 (6)
Other	4 (14)	10 (32)

A total VOICE score for each participant was generated by summing the scores of each completed item on the questionnaire. A mean overall score for both the control and intervention wards was generated by summing the participants' total scores and dividing by the total number of participants for each ward. The total VOICE score for the control and intervention ward is shown it Table 21.

Table 21 – Mean total response for the VOICE by control and intervention ward

Ward	**Service user score, mean SD**	**Reference value, mean (SD)**
Intervention (n = 29)	50.8; SD 14.9; range 30 – 92	55.5 (19.2) male; 52.5 (17.8) female
Control (n = 31)	51.8; SD 16.8; range 20 – 92	
Reference value from Evans et al. 2012 Possible scores range from 19 to 114 (higher score = worse perception of inpatient care)		

Mean VOICE scores for both wards fell within the lower half of the scale, with just one-point difference between the control and intervention ward mean scores. This may suggest that service users' overall perceptions of inpatient care were in the more positive range; however, there is a large range of responses on both wards, which indicates that some service users had negative perceptions of inpatient care, whilst others positive perceptions.

There were six questions in particular where participants had not responded on the Likert scale, but had written next to the Likert scale that the question was not applicable to them or given a justification of why they had left the Likert scale blank. This happened most regularly on the following questions:

1) Did you find one to one interactions with staff helpful? Participants wrote N/A or "I did not receive any one to ones with staff" or simply left the question blank
2) I was made to feel welcome when I arrived on the ward. Two participants wrote "I can't remember"
3) I feel able to practice my religion. Nine participants wrote N/A
4) I trust staff to do a good job. Two participants indicated somewhere between the middle point on the Likert scale and wrote "neither agree nor disagree" or "some do, some don't"
5) I think staff respect my ethnic background. Two participants wrote N/A
6) I think activities on the ward meet my needs. Two participants wrote N/A

Not all questions left blank had qualitative answers next to them, therefore it was difficult to distinguish between questions that were left blank because they did not apply, or questions that were left blank due to accident. Therefore, the pragmatic decision was made to exclude questionnaires where participants had answered less than 16 items (4 missing values). This excluded 4 questionnaires.

8.4.4 Discussion of the VOICE questionnaire in the wider literature

As reported above, perceptions of inpatient care were almost identical on the control and intervention ward. The authors who developed the measure state that the higher the score the worse the perception of care (Wykes et al. 2018). Both the control and intervention wards scored slightly higher than the midpoint score of 66.5 at 51.8 and 50.8 respectively. It is reasonable to conclude that perceptions of inpatient care were on the more positive side, despite qualitative interviews presented in Chapters 5 and 6 which described a poorer perception of inpatient care (McAllister et al. 2019a). This may be because service users who took part in the interviews had different experiences to those who completed the VOICE questionnaires, with some of them not having had an inpatient stay for a number of years. The mean VOICE scores were slightly lower (meaning more positive) than the reference value provided in Evans et al. (2012). These scores were similar to those reported in a study that examined service user experiences to identify barriers and facilitators to collaborative care (Simpson et al. 2017). Simpson and colleagues collected data across 19 wards on six sites and found a wide variation in VOICE scores, with a mean score ranging from 46-52, describing perceptions of care as more positive. Interestingly, another study that examined the perspectives of service users on inpatient wards over time reported a mean VOICE score of 52, which worsened over time to 59 (Csipke et al. 2016). Despite being in the lower range, they still described perceptions of inpatient care as poor.

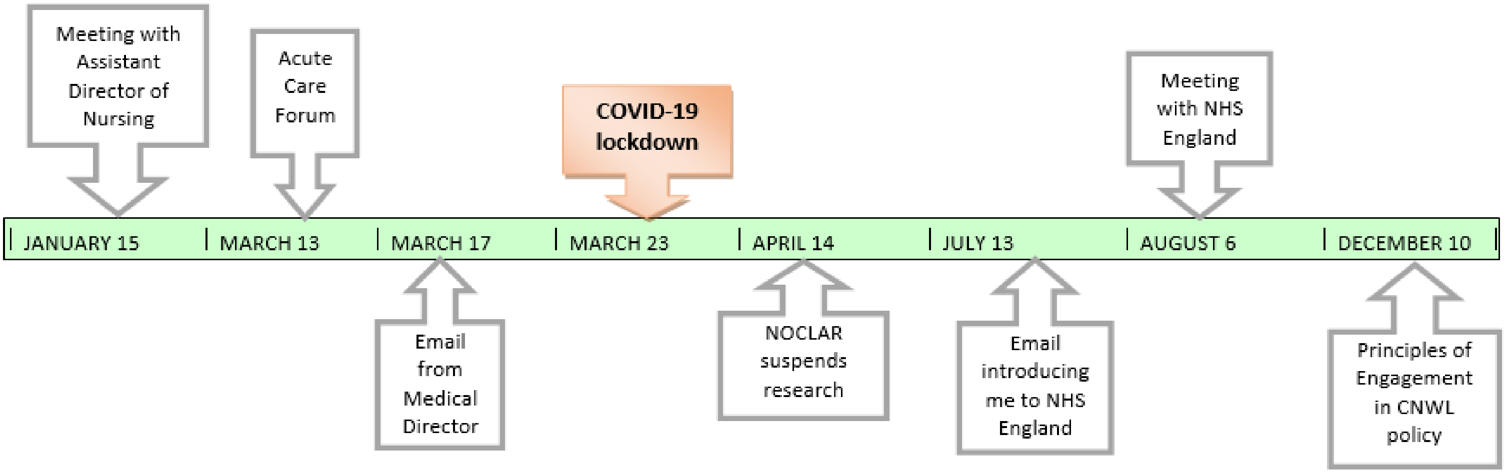
VOICE was developed and tested with extensive service user input (Wykes et al. 2018); however, there were several inconsistencies that were identified in the data derived from VOICE that may have impacted on the results of this study. Question eight states “staff are available to talk when I need them” and question 13 states “I find one to one time with staff useful”. There was much inconsistency identified between these two questions, with 28.3% of participants across both the control and intervention wards recording that they felt staff were available, but either did not receive one-to ones or did not find one-to-ones helpful, or staff were not available, but they found one-to-ones helpful. There are two possible explanations for this. First, it is possible that when one-to-ones occur, service users find them useful, however they do not occur often. This is in line with previous qualitative research that examines service users' perceptions of nurse-patient interactions (Cleary et al. 2012, McAllister & McCrae 2017) and quantitative research that examines the amount of therapeutic engagement on acute wards (Sharac et al. 2010). In contrast it may also indicate that some nurses lack the skills needed to engage in a therapeutic manner, as was found in research presented in Chapters 5 and 6 of this thesis. It is likely that it may be a combination of both of these factors, as the quality of one-to-ones has been found to strongly depend on the therapeutic relationship between the members of staff and the service user (Hartley et al. 2019).

The questionnaire would have benefited from a "not applicable" option, as there were several questions where service users left the response blank or wrote a qualitative answer next to the Likert scale that contradicted what was recorded on the Likert scale. An example of this is question 13: "I find one to one time with staff useful." 18.3% of participants either left this blank, or indicated that they found one-to-one helpful, however wrote things like *"don't get one-to-one"* or *"not enough manpower for one-to-one."* As this research was particularly interested in therapeutic engagement, an instrument that more specifically measured delivery and experiences of one-to-one nursing care may have been useful and produced results that were more applicable to testing an intervention that aimed to improve engagement. Despite this, to date no validated measure has been produced that specifically measures this aspect of care.

8.5 COVID-19 and the wider impact of the work

As previously discussed in section 8.2 of this chapter, the global COVID-19 pandemic took place just as I was coming to the end of my co-design activities, but before the intervention was able to be tested in practice. Figure 17 shows a timeline of activities leading up to COVID-19 and the activities that followed, including attendance at an Acute Care Forum in March 2020 - which was substituted as the EBCD celebration event - and meetings with NHS England in August 2020 and the inclusion of the Principles of Engagement in Trust policy in December 2020.

Figure 17 – COVID-19 timeline and its impact on the study



8.5.1 Acute care forum and implementation plan

In December 2019 I became aware that the Trust had undertaken a scoping exercise to identify and understand all the work that was currently being conducted to improve the quality of acute care services. An event was held, where staff and service users from the acute care pathway identified two improvement priorities for the Trust: 1) Protected Engagement Time/releasing time to care and 2) the patient's story – "what matters to me". To work on these priorities, the Chief Nurse scheduled another event to take place in March 2020, which they called the Acute Care Forum. I contacted the Chief Nurse directly to ensure she knew about my work, as it matched perfectly with the Trust's two priorities. She was enthusiastic about what I was doing and put me in contact with the Assistant Director of Nursing so we could have a meeting to further discuss my work and figure out the best way of taking it forward. Getting buy-in from senior management was imperative as by this time, most of the clinicians who had been involved in the co-design work had left the ward and although the new ward manager had shown an interest in the work, it was difficult to contact him unless I scheduled face-to-face meetings, which often took weeks to plan. It was clear that testing the intervention was going to be more difficult as the buy-in and momentum from ward staff was not as strong as it had been immediately after the joint co-design event.

I met with the Assistant Director of Nursing on 15 January 2020. The meeting was positive, and we made some initial implementation plans:

1) My co-design team and I were invited to showcase our work at the Acute Care Forum and show the trigger film that we had made

2) The nursing director agreed to contact the communications team to promote the work within the Trust as a way of building up momentum with ward staff again
3) The nursing director agreed to link me in with the training and simulation team as a way of supporting the implementation of the co-designed training film and showing it to nurses within the Trust
4) I would also be linked in with the health and safety team so they could review the door sliders and arrange for them to be attached to the service users' doors
5) We discussed the potential to use the intervention toolkit to support the reimplementation of PET within the Trust

Box 3 – Email communication from the Assistant Director of Nursing after our meeting

21 January 2020:

Hi Sarah, thank you so much for kindly meeting with me and sharing the great work underway on [*] Ward. I have shared our discussion with [* Chief Nurse] and we are keen to support the work. As discussed, I will link you in with the simulation and training team and the health and safety team. I will also contact the communications teams. Please could you send me a summary of the work so I can filter this information down.

Once we have firmed up the date (sometime March '20) and venue I will be in contact to invite you to the Acute Care Forum where you can showcase your work and show the video.

* name removed for confidentiality purposes

I fed this news back to my co-design team, and invited all members (service users, carers and clinicians) to attend the Acute Care Forum. Four service user members of the co-design team and I attended the Acute Care Forum. Notably, none of the ward staff were able to attend the forum, which further highlighted the need to gain support from middle/senior management. The Acute Care Forum occurred on 13 March 2020 (just 10 days before the national COVID-19 lockdown). Approximately 40 service users and staff attended. I presented our work and showed snippets of the trigger film. The work clearly moved people and we received comments such as: *"this is exactly the type of work we need to be doing at the Trust"* and *"I've been blown away by the inclusive nature of this work."* After my presentation it was confirmed that the intervention toolkit would be used to support the reimplementation of PET on some acute wards and the training and simulation team said they would support the training film for nurses once the final version had been produced. Unfortunately, due to COVID-19, this was a very uncertain time, and it was made clear that anything we agreed on during the forum would have to be put on hold until the Trust had a better idea about the impacts of COVID-19. However, it was still deemed important to hold the forum as the Trust wanted to have a plan in place to keep the momentum going once COVID-19 settled down.

Over the following months I remained in email contact with the relevant people at the Trust as I wanted to foster these relationships and keep updated about the Trust's plans post COVID-19. Box 4 shows snippets from these email communications.

Box 4 – Email communication with the Medical Director and Associate Director of Strategy, System Transformation & Partnerships

From the medical director (17 March 2020):

It was really good to meet you last week at the acute care forum – I'm the one who came up to your table all enthusiastic about how we could link in to take your fantastic work forward!

I am copying in [*], who is our Associate Director of Strategy, System Transformation & Partnerships and working with me on our acute and urgent care transformation programme (which [* Chief Nurse] is now chairing the board for).

I was wondering if there is any way you could share the video clips that you showed since they were so powerful? But either way at this stage linking you in so – notwithstanding all the COVID challenges – we think about how we could learn from what you are doing and take this forward.

My reply:

Thank you for getting in touch, it was great to meet you at the acute care forum and it's so nice to see somebody who's so enthusiastic about the work! And hello [*], nice to "meet" you, albeit virtually.
Let me get back to you regarding the video clips. I just need to check what was agreed with NHS research ethics in terms of video sharing.

As I said at the acute care forum, we are almost ready to implement the toolkit. Obviously COVID-19 will be taking priority right now, but I would be really interested in having some conversations about when we think implementation could/should happen. Let me know your thoughts when you get the chance?

Medical director's reply (26 March 2020):

Yes, you are right the COVID situation is dominating things right now but equally I don't want to lose momentum of the work you've done to date. Actually, I think it might be that we could arrange something remotely but perhaps we need to find the right time since it is incredibly chaotic and changing fast at the moment. Once we've all got more used to remote working let's check in again?

* name removed for confidentiality purposes

During this time COVID-19 became more severe and it was clear this may become a long-term problem. I was made aware that all non-COVID related research was to be paused until further notice and the Trust still had no plans to action anything that was agreed on at the Acute Care Forum, other than potentially holding another virtual meeting in November 2020. This meant it was unlikely I could test the intervention within the timeframe of my PhD fellowship, which was due to end in March 2021. To work, the intervention needed the Trust to implement PET and until R&D authorised the re-start of non-COVID related research I had to wait. This was obviously very disappointing, however due to the relationships I had built with staff after the Acute Care Forum I was given an opportunity to use the work with NHS England to inform guidance and frameworks for the NHS Long Term Plan (NHS 2019) and the commitment to improve the therapeutic experience of acute mental health wards.

8.5.2 NHS England: the national impact

As highlighted in the email communications in Box 5, the Associate Director of Strategy at CNWL linked me up with the senior project manager for NHS England who was working on developing guidance and frameworks to fulfil the NHS Long Term Plan's priorities for improving therapeutic inpatient care.

Box 5 – Email communication with NHS England

From the Associate Director of Strategy to me (13 July 2020):

Great to meet you virtually and thanks for the slides – this looks really interesting. [*Medical Director] and I picking up, and I have also passed on to [*] in my team who is leading on the MDT skills mix work for our acute transformation programme.

I wanted to ask you separately in addition, in case you were interested - I sit on a national group with NHS England who are developing the guidance and frameworks for the Long Term Plan commitment to improve the therapeutic experience on inpatient wards – I wondered if you would be interested in me linking you in with the project manager there to share your learning on this? Just an extra thought – no worries if not!

From the Associate Director of Strategy to the NHS England Project Manager (13 July 2020):

Hi, Hope all well with you. I wanted to put you in touch with Sarah McAllister, NIHR Clinical Doctoral Research Fellow at King's College London, who has worked with CNWL on understanding and improving therapeutic engagement between nurses and service users on acute mental health wards. I thought you might be interested in her findings and learnings. I have copied her here so you can get in touch direct.

Sarah – to intro you, [*] is a senior project manager in the NHS England national team leading on the Long-Term Plan commitments around therapeutic acute MH care.

* name removed for confidentiality purposes

On 6 August 2020 I had a Microsoft Teams meeting with NHS England and discussed the work I had done to date. They felt the work could help inform the guidance and frameworks they were working on and were particularly interested in four aspects of my work:

1) NHS England requested a copy of the trigger film as they thought that understanding how acute services were experienced by service users and carers was important. They also wanted to recommend the film as a tool for services to use to increase knowledge and skills of clinicians. Due to confidentiality reasons, I was unable to share the film with NHS England as understandably, some of the service users did not feel comfortable having their personal

accounts used in the wider public arena. However, I have provided them with a copy of the paper reported in Chapter 5, which they can use to highlight experiences of service users and carers on acute wards

2) I provided NHS England with a copy of my integrative review paper (Chapter 4, paper 1) as they were interested in using the "Principles of Engagement" to inform guidelines on therapeutic engagement
3) NHS England wanted me to provide information about the results of the semi-structured interviews relating to the barriers to engagement (presented in Chapter 6, paper 3). It was agreed that once these results were published, I would share them
4) It was also agreed that when/if the intervention toolkit was tested, I would share the results with NHS England, particularly if positive as they would then recommend the use of the toolkit in practice and use our example as a case study of good practice

At the time of writing, this professional relationship is still ongoing, and I intend to share results as and when they become available.

8.5.3 CNWL therapeutic engagement and observation policy: the local impact

In addition to the work with NHS England, the Trust's divisional Assistant Director of Nursing contacted me to request the use of the "Principles of Engagement" in the Trust's therapeutic engagement and observation policy. Box 6 shows the email communication.

Box 6 – Email communication with Assistant Nursing Director

From the Assistant Nursing Director to me (10 December 2020):

Dear Sarah, I am in the process of reviewing and revising our Trust policy on Therapeutic Engagement and Observation, and have come across your paper, "Conceptualising nurse-patient therapeutic engagement on acute mental health wards: an integrative review using the Theoretical Domains Framework". I have found it so helpful in that it draws together so much evidence and sets out a potential framework for addressing the really complex process of therapeutic engagement in wards.

Would you mind if I use the Principles that you have described within our policy - they seem to capture and describe a clear and succinct range of components, consistent with the literature I have read. I would like to use the Principles, but to alter some of the language as our policy has to be relatable for all of our staff on inpatient units, not just qualified nurses.

The policy was recently released Trust wide (see policy via this link: https://www.cnwl.nhs.uk/application/files/8216/1831/0388/CNWL_Therapeutic_Observations_and_Engagement_Policy.pdf), setting out the Principles of Engagement (McAllister et al. 2019) as the suggested method for therapeutic engagement at CNWL. As of February 2021, I have taken up a substantive post at the Trust as an Improvement Consultant and as part of my new role I will be working with the Assistant Director or Nursing, the Head of Education and service users and carers to further develop training for nurses based around the Principles of Engagement, which will include the film that was co-designed as part of this PhD study.

8.6 Chapter 8 summary

This chapter has described the initial plan to test the intervention toolkit in a pre-post-test on a control and intervention ward and the subsequent actions after the COVID-19 pandemic interrupted the planned work. Although the toolkit will not be tested as part of my PhD, work from Chapters 4, 5 and 6 was used to inform the development of guidelines and frameworks to fulfil the commitments of the NHS Long Term Plan for Mental Health. The work from Chapter 4, paper 1 has also be used to inform Trust policy on therapeutic engagement and observations. Furthermore, subsequent to completing my doctoral study I have secured a fulltime role at the Trust as an Improvement Consultant, in which I will be coaching clinical teams to bring about quality improvements to their services. It is anticipated that I will be able to carry on the work that was done as part of my PhD and test and implement the intervention toolkit with clinical teams as part of a programme of quality improvement work in my new role.

CHAPTER 9: DISCUSSION

9.1 Introduction

The final chapter of this thesis first presents a summary of the key findings and their original contributions to knowledge, then critically reflects on my role within the research. This is followed by a critical reflection on the methodological approaches used, which culminates in an examination of the overarching strengths and limitations of the work. Recommendations for clinical practice, education and research are made, and the chapter ends with a summary of the main conclusions.

9.2 Summary of key findings

This thesis reports on original research that conceptualises nurse-patient therapeutic engagement and develops a complex behaviour change intervention to improve therapeutic engagement on acute mental health wards using Experience-based Co-design (Bate & Robert 2007) guided by the Behaviour Change Wheel (Michie et al. 2014) and informed by the MRC guidance for developing and evaluating complex interventions (Craig et al. 2008).

As a starting point for intervention development, a systematic integrative review, presented in Chapter 4, paper 1, conceptualised nurse-patient therapeutic engagement on acute mental health wards and developed five "Principles of Engagement" that showed the ideal behaviours that nurses should display when engaging therapeutically with service users (McAllister et al. 2019). Guided by the COM-B model (Michie et al. 2014) and TDF domains (Cane et al. 2012), potential influences on therapeutic engagement were identified. The Principles of Engagement and influences on engagement were brought together to produce the first conceptual model of therapeutic engagement on acute mental health wards. Chapter 5, paper 2 presented data from non-participant observations and semi-structured narrative interviews, guided by the COM-B model and TDF domains. This further examined the potential influences on therapeutic engagement through the identification of 28 touchpoints by service users, carers and clinicians, which gave a deeper understanding of how therapeutic engagement is subjectively experienced at one acute mental health Trust (McAllister et al. 2021a). The chapter also empirically validated the conceptual model of engagement. Chapter 6, paper 3 used a new and novel theory-driven co-design behaviour change process to develop an intervention toolkit to improve therapeutic engagement. In a series of facilitated feedback and co-design workshops the touchpoints identified in paper 2 were developed into four joint service user, carer and clinician improvement priorities, which were thought to enable the Principles of Engagement, developed in paper 1, in practice. Influences on therapeutic engagement identified in paper 1 and paper 2 were mapped to evidence-based intervention functions and behaviour change techniques (Michie et al. 2013), and a co-design team of service users, carers and clinicians developed the first theory-driven complex behaviour change intervention to improve nurse-patient therapeutic engagement on acute mental health wards. Reflective accounts given by participants showed that the co-design process positively impacted some participants' behaviours. Chapter 7, paper 4 used the Behaviour Change Wheel, including the BCTTv1 (Michie et al. 2014), the COM-B model (Michie et al. 2014) and the TDF (Cane et al. 2012), to identify and examine the behavioural mechanisms of action behind EBCD. Through this, the first taxonomy of BCTs and mechanisms of action related to EBCD was developed. Chapter 8 presented the results from pre-test data, discussed the effects of the COVID-19 pandemic and highlighted the ongoing impact of the research both at an organisational and governmental level.

A discussion of the main findings from the research in relation to the wider literature is presented within the published and submitted papers (Chapter 4, 5, 6 and 7) or at the end of the chapters not presented as published or submitted papers (Chapter 8). This chapter will now critique and reflect on my role in the research process and the methodological approaches used to develop and evaluate the intervention.

9.3 Critical reflection on my role within the research

Clinicians often see research as a burden, rather than a means of improving practice. As a registered mental health nurse, I was able to use my experience to connect with participants throughout the duration of the research. By introducing myself as a mental health nurse who is conducting research, I was able to use my personal experiences of therapeutic engagement as an introduction and reason for why the research was important. I feel this helped me to bond with the clinicians and gave me credibility when trying to establish buy-in from senior stakeholders. During the interviews I used my experiences as a nurse to encourage participants to speak in more detail about their clinically related experiences. Reaffirming with them that what they were saying was something I could relate to, appeared to increase their trust and, in my opinion, made them more candid and honest in their responses to certain questions.

Despite this, it was important that I balanced such familiarity with an open and curious approach, rather than assume that I understood an individual's experience or account. This was important so that I did not draw conclusions too quickly during the interviews and assume I understood something when further questioning would and should have been appropriate. This was also important to help ensure that my own assumptions did not drown out the voice of the service users, carers and clinicians during the analysis of the interview and observation data. My supervision team, which included members with and without acute mental health care expertise, helped to balance this impact through open discussions about the analysis and feedback on my interviewing style. Furthermore, the EBCD feedback workshops enabled the service users, carers and clinicians to confirm that my analysis was a true reflection of their experiences of therapeutic engagement. In the publications relating to this data, I have also used direct quotations from the participants and vignettes that objectively detail events that I observed which also aim to create dependability and authenticity (Graneheim et al. 2017).

Although I had much experience and knowledge of both therapeutic engagement and the context of an acute mental health ward, my knowledge of co-design, behaviour change and more broadly intervention development was limited. To learn more about Experience-based Co-design I completed the Point of Care Foundation course – this taught me valuable skills in how to set up and run an EBCD process and enabled me to network with others who had successfully carried out an EBCD project. To learn more about behaviour change, I took the intermediate and advanced Behaviour Change Summer School at UCL; I found these summer schools incredibly valuable, particularly because it brought to light just how many healthcare problems are behavioural in nature. It also equipped me with the skills to systematically explore behavioural problems and gave me a grounding in how to use the BCW to develop an intervention. This knowledge was particularly useful because at first, I felt rather overwhelmed at how emergent the EBCD process may become and the BCW gave me a methodical framework to base intervention development from and draw all the data and ideas together in a coherent, evidence-based way.

At times I found it difficult to hand over control to the co-design team. I was particularly concerned about the timeframe; I had to complete this PhD work and recognised that developing an intervention through such a collaborative method would take considerably longer than if I did not involve service users, carers and clinicians in such a meaningful way. I often had to resist the urge to take control of a situation or push a conversation in a way that would influence the co-design team's decisions on the content of the intervention. A two-day NatCen course on moderating and facilitating focus groups, that I undertook before beginning the co-design process, gave me useful skills to use when I felt the urge to take over. Among other things, we role-played group facilitation in a safe and non-judgmental environment. This was helpful in allowing me to practice ways of moving conversations along without prescriptively directing them. It involved asking open-ended questions, then clarifying and giving time and space for people to speak up. During the intervention development process, I realised that this was quite similar to the skills that I was used to employing as a mental health nurse, only I was applying them in a research capacity rather than a clinical capacity. Once I had this realisation, it became easier to facilitate the process without trying to take control.

Through my new role as Improvement Consultant at the participating Trust, it is anticipated that I will be able to conduct further modelling and testing of the intervention as part of a quality improvement project. This will enable the intervention to be further refined and to test its acceptability, usability and feasibility with clinical teams. Longer term I am hoping to apply for further NIHR funding to test the intervention in a definitive RCT.

9.4 Critical reflection of the methodological approach to developing *Let's Talk*

A critique of the methodological approaches and the challenges that were encountered throughout this PhD will now be considered, to identify the main strengths and limitations of this work.

9.4.1 A combination approach to intervention design

The work in this thesis was underpinned by a participatory inquiry paradigm (Heron & Reason 1997) that put service users, carers and clinicians at the centre of intervention design. The MRC Framework for Developing and Evaluating Complex Interventions (Craig et al. 2008) was used for pragmatic reasons, but importantly provided a useful starting point from which I, as a novice intervention designer, could consider relevant aspects that needed to be addressed within the intervention development process. This included deciding on the best overall approach to intervention design and choosing relevant theory to guide intervention development.

As discussed in Chapter 3, after careful consideration, a combination approach to intervention design (O'Cathain et al. 2019a) was deemed the most suitable for addressing the complex nature of therapeutic engagement. Combining EBCD (Bate & Robert 2007) with the BCW (Michie et al. 2014) adhered to my own philosophical viewpoints and enabled limitations from one approach to be offset by the strengths of the other. For example, EBCD is sometimes criticised for unrealistically expecting participants to generate workable solutions to longstanding problems without the use of a guiding theory or philosophy (Iedema et al. 2010, Adams et al. 2013). The addition of the BCW offset this limitation by ensuring that intervention design was theoretically driven, and participants' improvement ideas were supported by a coherent, comprehensive and systematic theory of behaviour change (Michie et al. 2011). In contrast, the BCW approach is often criticised for lacking clear guidance on how to collaboratively involve key stakeholders (Michie et al. 2014), thus combining it within a systematic co-design process enabled the meaningful involvement of service users, carers and clinicians within the intervention development approach. This new and novel approach will be useful to those who wish to embark on collaborative service improvement or intervention development that are behavioural in nature. I will now critically reflect on the use of each element of the combination approach that was used to fulfil the development phase of the MRC Framework (Craig et al. 2008).

9.4.2 Experience-based Co-design: service users and carers

Choosing to adopt an EBCD approach explicitly acknowledges that involving service users, carers and clinicians within the intervention design process is vital (Bate & Robert 2007). However, enabling authentic engagement was extremely challenging and required time, flexibility, tenacity, creativity and resources. EBCD has been used extensively in physical healthcare (Donetto et al. 2014) but its use within a mental health setting is still relatively new (Larkin et al. 2015). The early stages of the project required much explanation to funders, service providers and the ethics committee, particularly about how mental health service users could be involved in an approach that demands so much input from participants. To my dismay, there was often the view that service users would not have the capacity or capability to collaborate on intervention development, despite the plethora of literature and policy that advocates for service user involvement (NHS England 2014b, WHO 2015, Beresford et al. 2016, INVOLVE 2020b). In recent years there have been significant attempts to address the stigma faced by people with mental health problems with media campaigns such as Time to Change (e.g., Evans-Lacko et al. 2014). These campaigns have focused on addressing stigma within the general public, however stigmatisation by mental health professionals is still an issue within mental health services (Corker et al. 2013). These entrenched views led to some key stakeholders initially dismissing the project as unachievable, thus requiring tenacity on my part to persuade and prove otherwise.

Although such assumptions about the inability of service users' to be involved in co-design work should not be made, there are particular issues that must be considered when involving service users from a mental health setting within an EBCD project. Using EBCD safely within mental health services requires extra thought and increased amounts of support for the participants (Boden et al. 2018), as many mental health service users can be considered vulnerable (Mulvale et al. 2019) and care must be taken not to reinforce commonly held power and knowledge structures (Rose &

Kalathil 2019). As discussed in Chapter 3, there were several adaptations made to the EBCD approach to ensure service users could safely be involved. These measures included recruiting a core co-design group that consisted of two service users and one carer before the EBCD process began. These individuals were trained in the EBCD approach, so they could offer extra support to other co-design team members throughout the EBCD process. I also employed a lived experience practitioner to facilitate the EBCD events to attempt to ease the well documented power imbalances that may occur between the service users and clinicians during the co-design process (Springham & Robert 2015, Farr 2018).

Overall, I found these adaptations to be helpful to the smooth running of the project. They also resulted in additional benefits to the project participants. For example, the service users who undertook EBCD training were empowered to take a lead role within the process. They often helped to explain EBCD processes to other co-design team members as discussed in Chapter 6. This broke away from the traditional “top down” approaches that encourage tokenistic service user involvement (Beresford 2005) and fostered a feeling of ownership over the project among the service user and carer segment of the co-design team. Anecdotally, a member of the core group told me that using his newfound skills to help others in the group had built his confidence in other areas of his life.

Initially, I had hoped that the core group would act as a support to others in the co-design team outside of the scheduled workshops as well as within the workshops. I had also hoped they may take a lead role in organising the events, as happens with ResearchNet, a co-production network that is made up of service users and carers who conduct co-design research (Springham et al. 2011). In retrospect, I realise I may have been expecting too much from the core group, particularly when the EBCD approach already requires a large time commitment from participants (Larkin et al. 2015). The event organisation and management took up considerable time; time that could not be expected from the core group unless they were a fully paid member of the research team. As I did not have the means to pay or support them as such, I took responsibility for the organisation and management of the events. It is also vital that all members of the co-design team are emotionally supported throughout the process (Boden et al. 2018), including the core group. Thus, expecting the core group to take on the emotional burden of other participants whilst also taking part in activities that were out of their usual comfort zone seemed unethical. This was discussed with the core group and it was decided that I would hold debriefs with the service user and carer members of the co-design team after each workshop if it was considered necessary.

This was particularly important after a session with my PPI group, where we received a lot of constructive feedback on the intervention prototype. It was clear we would need to make many changes to the intervention based on the feedback and some of the co-design team seemed upset and demotivated by this. Although this may have been a sign that they felt ownership over the project (Beggan 1992), I realised I had not prepared them for the prospect of extensive refinements, which could potentially impact on their continued enthusiasm for the project. To overcome this, we had a debrief immediately after the meeting, where I shared a personal example about another time that I received constructive feedback and how I went about addressing it to improve the work. The act of sharing personal stories to motivate others is a well-documented technique within the design and organisational change literature (Gill 2015, Sangiorgi et al. 2019). The debrief enabled us to take stock and refamiliarise ourselves with what our goals were, which was ultimately to produce an intervention that would be useful to service users and clinicians in practice. This enabled the co-design team to see the feedback as positive and a source for improving our intervention, rather than feeling like it was a personal criticism of our work. The quality improvement literature suggests that failures should be used as a chance to learn and improve (Dixon-Woods & Martin 2016). While this feedback was not considered to be an outright failure, the same principles still apply. In the future I will always prepare my teams for the chance of challenge or 'failure' early on. By doing so it can be used as a learning tool rather than negatively impacting motivation.

As well as providing debrief sessions, it is important to provide safe spaces where participants feel able to openly contribute to the co-design process (Springham & Robert 2015). This depended on the use of sophisticated facilitative skills and an awareness of people's emotions. Taking into consideration the power differentials between service users, carers and clinicians, which are still all too evident in mental health services (Rose & Kalathil 2019), I employed a lived experience practitioner to facilitate the EBCD workshops. Research shows that reducing the distance between researchers and those they research enables a more authentic connection to be made (Rose 2004, Williamson et al. 2010) and ensures that experiences are not misunderstood or misinterpreted (Beresford 2010). At the service user feedback workshop, the input of the lived experience practitioner was invaluable. As she had her own personal experiences of using mental health services, she was able to connect with the co-design team in a way that enabled them to speak freely about some of the more difficult experiences they had survived. She was then able to facilitate discussions that enabled these experiences to be translated into targeted improvement priorities.

As described in Chapter 6, the staff feedback workshop and co-design workshop had to be postponed, which meant I was unable to arrange another date where both the clinicians and the lived experience practitioner were available. As a result, I facilitated the workshops, with the help of another nurse colleague who is experienced in group facilitation and qualitative research methods. Although disappointing, this was a good learning experience for me, however I was mindful that this may change the power dynamics within the group, particularly since I am a mental health nurse by background. Although the participants knew this, I had never worked with any of them in a clinical role and by the time of the joint co-design workshop I had built a strong, collaborative relationship with the co-design team.

Most importantly I wanted to ensure that the workshops were centred around what was important to the service users, carers and clinicians, rather than my interpretation of that. To do this I needed to reduce the distance between the researcher and the researched, as discussed above (Rose 2004, Williamson et al. 2010). As such, I encouraged the service users, carers and clinicians to present their own improvement priorities and introduce the trigger film. A core group member did this for the service users and carers, however it was not possible for the clinicians to do the same, which will be discussed later in this chapter. Supporting a service user to present the group's thoughts and ideas in their own words appeared to inspire commitment and discussion among the co-design team, as well as enabling the service users to demonstrate ownership over their work (Point of Care Foundation 2020).

Co-design work often requires participants to be involved for long periods of time (Donetto et al. 2014). I worked alongside some members of the co-design team for the whole duration of my PhD (3 years). When co-designing in a mental health setting, some people involved in the process may become unwell due to the relapsing nature of some mental health problems (Springham & Robert 2015). Unfortunately, this happened to one of the service users in my co-design team. As discussed at length throughout this thesis, a longstanding issue within mental health services is that service users are excluded from making decisions about their care (Boardman 2011) and from meaningful involvement in research (Rose & Kalathil 2019). When this service user became unwell, ethically I had to ensure that further participation did not harm her in any way; however, it was also important to ensure that I did not reinforce the feelings of exclusion and alienation that many service users experience. Ensuring I was open and honest about my concerns was vital in retaining her trust and she agreed that I could speak to her clinical team so they could reassure me that it was safe for her to still participate. By doing this, the service user was still able to participate at the joint co-design workshop, ensuring that feelings of exclusion and alienation were not reinforced.

9.4.3 Experience-based Co-design: the clinicians

Vital to EBCD's success is gaining buy in from senior management and key gatekeepers (Point of Care Foundation 2020). As previously discussed, some key gatekeepers had doubts over whether the service users had the capability and capacity to be involved; however, after some negotiation, senior buy in was achieved and the Borough Director and Clinical Service Director said they would support the study. Despite the gatekeepers' initial concerns, as the study progressed it was clear that the service users were able to take a more active role within the co-design process than the clinicians. Although difficulties in recruiting and retaining clinicians has been experienced in other EBCD studies both in a mental health (Springham & Robert 2015) and general medical setting (Piper et al. 2012), the importance of gaining the trust and cooperation of frontline staff is well documented (Donetto et al. 2014). In previous EBCD studies a local study champion has been essential to the smooth running and continued engagement of clinicians (Raynor et al. 2020). Unfortunately, within this work, it was not possible to identify a local champion for several reasons which will be discussed below. This negatively impacted on the full engagement of clinicians within the process.

I was invited to present the study and its aims at the intervention ward's away day, where I also offered EBCD training to clinicians who may be interested in championing the work at ward level. The presentation was well received, and we discussed how this work matched with certain ward priorities such as improving communication with service users. Several clinicians approached me to show interest in the study and ask about the EBCD training; however, after the away day the ward manager said that it would no longer be logistically possible to enable the clinicians a day out of practice to attend the EBCD training. This severely impacted on the momentum that had been built from the away day, and potentially demoralised the interested clinicians. When frontline staff feel unsupported and/or unheard, research consistently shows how this negatively impacts on their willingness to be involved in change initiatives (Coetzee & Stanz 2007, Nilsen et al. 2020). It would be reasonable to conclude that these clinicians felt the same, particularly as their interviews revealed a breakdown in trust between frontline clinicians and managerial staff (McAllister et al. 2021a).

Despite this setback, the ward manager worked with me to create a logistical plan on how the study should be run within the context of an acute mental health ward. We agreed that I would base myself in an interview room on the ward and clinicians would "drop-in" for a 30-minute interview about their experiences of therapeutic engagement. We agreed that the staff feedback workshop should be held after the ward's weekly staff meeting, with this happening more than once to enable many staff to be involved. Unfortunately, these approaches did not work. Despite the promise of piggybacking staff meetings, these meetings did not occur regularly, and I was unable to recruit any clinicians through the drop-in session method. Although there is an NMC requirement for nurses to engage in research activities (NMC 2018), on an acute ward where the environment is unpredictable and sometimes volatile (Deacon et al. 2006), a full complement of staff is vital to maintain patient safety. Thus, it became apparent that I would need to provide extra support so that clinicians could remove themselves from the ward for the half an hour interview, whilst still ensuring the safety of the ward.

After a meeting with my advisory group, which was held to discuss the challenges with clinician recruitment, it was decided that I could reallocate funds from my NIHR grant to provide backfill money to the ward. This would enable agency staff to cover the ward whilst the regular clinicians took part in the interviews, feedback workshop and joint co-design workshop. A common criticism of the EBCD approach is that it requires significant time and resources on the part of the participating organisation (Donetto et al. 2014); if it had not been for my NIHR funding, the study in the form that it took may not have been achievable. However, the backfill money enabled the clinicians to engage actively and meaningfully in the narrative interviews, the clinician feedback workshop and the joint co-design workshop, as discussed in Chapter 6, paper 3. Both verbal and written feedback after the workshops showed that the clinicians really valued the opportunity to be involved in the work, with feedback such as: “we have never been given the opportunity to talk like this” and the feedback workshop “allowed space for reflective and honest discussions which probably wouldn’t have happened otherwise”.

Traditionally, the clinician feedback workshop should be held prior to the joint co-design workshop, with at least a week between each event (Point of Care Foundation 2020). This allows clinicians the time to collectively reflect on the discussions and outcomes of the feedback workshop and provides them the opportunity to feedback important information or decisions to other team members (Bate & Robert 2007, Point of Care Foundation 2020). Unfortunately, I did not have the budget to pay backfill money to run workshops on two days. Thus, the clinician feedback workshop and the joint co-design workshop took place on the same day. This limited the ability of the clinicians to reflect on the feedback workshop’s discussions and although the clinicians were able to air their concerns and reflect on their practice within the allocated two hours, they were unable to fully cultivate their ideas for improvement and involve other clinicians that were unable to attend. Furthermore, just six clinicians attended the feedback workshop; none of whom took part in the interviews and some who had only been working on the ward a couple of weeks. Due to this, feelings of ownership that are built when a team works collaboratively on a project over time were not created, which negatively impacted on the clinicians’ involvement in the work after the workshops.

Whilst at the workshops the clinicians were fully engaged with the process and several voiced their desire to continue with the co-design work after the workshops had finished; however, despite their good intentions, only two clinicians continued with the co-design work and none were able to join the small co-design team meetings that were held with service users due to clinical commitments on the ward. I continued to try to engage ward clinicians by feeding back summaries of the co-design workshop and outlining the intervention prototypes as they evolved via email and on *ad hoc* face to face visits to the ward. However, without the monetary means or organisational support structures to provide clinicians time to undertake the ongoing co-design work, much of the prototyping and iterative development of the intervention components were undertaken by the service users. This was further compounded by a constant change of staff on the ward. Within a month after the joint co-design workshop the ward had a new manager. Three clinicians who attended the workshop had left the ward, with at least another two due to leave the following month. This impacted further upon the team's ownership over the project, as ultimately the team that remained did not have any input into any stages of the EBCD process.

As discussed in Chapter 8, senior management invited me and the co-design team to present our work at a Trust wide acute care forum. At this event they showcased the work as "best practice" and an example to aspire to in terms of the level of service user involvement. In retrospect, however, while it was clear that senior management supported the work, which may be important for ensuring structures for intervention implementation are in place (Tappen et al. 2017), without a well-respected local champion who is able to assist the research team in keeping the momentum going, enabling clinicians to participate in the actual process of co-design was very challenging. Implementation science literature shows that strong, inclusive involvement of key stakeholders from top through to bottom levels is essential to successful intervention implementation (Morrow et al. 2014). Further, when a team feels they have ownership over a change initiative it improves the sustainability of an innovation (Locock 2003, Nilsen et al. 2020). However, despite my efforts to continually engage the clinicians, most of the remaining clinical team were not involved in the EBCD process. The intervention may have appeared to them just another top-down initiative they were expected to test and implement, which breaks away from EBCD's traditional grassroots approach (Bate & Robert 2007).

The quality of participatory research is often judged on whether new theoretical and practical insights and knowledge are gained, and whether these insights lead to change (Bradbury & Reason 2001). This work clearly resulted in new theoretical and practical insights, which have been discussed throughout this thesis. Although the intervention toolkit was unable to be tested due to COVID-19, and therefore conclusions about its impact on therapeutic engagement are not possible, Chapter 7, paper 4 highlights how the co-design process itself may have brought about change through a series of interrelated behavioural mechanisms of action such as emotion, intention, motivation (goals), social influences and reinforcement. This may also be evident through anecdotal accounts from service users and clinicians as discussed in Chapter 6. The EBCD approach is purposely cyclical in nature. Rather than having a definitive endpoint, the approach encourages a culture of continuous improvement (Bate & Robert 2007). In evaluation studies, some longer-term benefits have been identified such as fostering collaborative working practices between service users and service providers, improved communication between clinicians and service users and the strengthening of service user/service provider relationships (Donetto et al. 2014). While some of these benefits may be evident within this study, sustaining those changes will require ongoing and continuous facilitative and organisational support.

9.4.4 The behaviour change wheel

An in-depth discussion on using the BCW approach within the co-design process was presented in Chapter 6, paper 3, however there are some additional reflections that will be discussed here. Exploratory work conducted prior to this PhD study identified a clear behavioural problem: the amount and quality of nurse-patient therapeutic engagement on acute mental health wards was inadequate (McAllister & McCrae 2017). This provided the rationale for using behaviour change theory to understand and define the problem and guide the development of an intervention to change nurses' behaviour and improve therapeutic engagement. This work is the first to use behaviour change theory to link problem definition and intervention design in the context of improving therapeutic engagement. This is evidenced by the limited reference to theory and paucity in the specification of the active ingredients in previous interventions to improve engagement (e.g., Edwards 2008, Dodd et al. 2018, Molin et al. 2017).

The MRC Framework advocates the use of theory in intervention development (Craig et al. 2008). As discussed in Chapter 3, theory ensures the systematic development of interventions that are replicable and illuminates their potential causal mechanisms (Moore et al. 2015). Using the BCW (Michie et al. 2014) and TDF (Cane et al. 2012) enabled a clear presentation of the assumptions that underpinned *Let's Talk* and enabled the use of a recognised language of behaviour change. This will facilitate comparisons with other interventions, and allow generalisation across and between contexts, as well as evolving behaviour change theory (Michie et al. 2008). The MRC Framework is often criticised for lacking guidance on how to examine the context in which an intervention is delivered (Moore & Evans 2017). However, the COM-B model can be applied across various contexts and behaviours, thus its use in this work supported the MRC Framework by explicitly requiring an in-depth exploration of the specific context in which therapeutic engagement occurs. This may limit the conclusions that can be made about the application of *Let's Talk* in contexts different to that of this PhD study, however, it is reasonable to conclude that the context of the acute mental health ward in this thesis is similar to that in other parts of the UK and in other Western countries. The findings from our COM-B analysis are replicated in other studies in countries such as Australia (Cleary et al. 1999a), Sweden (Molin et al. 2016), and a multitude of UK based research (McAllister & McCrae 2017, Keefe et al. 2020).

The BCW approach is generally seen as advantageous to intervention development, however in areas where there is an established theory or group of theories, some may argue that a supra-theory such as the BCW is unnecessary and difficult to operationalise. However, in the context of therapeutic engagement, the use of theory to understand and improve it is in its infancy, with this work being the first to utilise theory to understand, conceptualise and improve engagement. The BCW can act as a systematic, comprehensive and coherent guide to the non-specialist intervention designer (Michie et al. 2011) such as myself and the co-design team. It was of particular use in ensuring there were no gaps within the intervention after the joint co-design workshop when an initial prototype had been developed. It also enabled us to systematically consider and address many potential barriers to therapeutic engagement throughout the co-design process, more so than if we used a co-design approach alone.

An important aspect of the modelling stage of the development phase of the MRC Framework is to understand what may be feasible in practice, through an iterative process of experimentation (Craig et al. 2008, Michie et al. 2008). Although the COVID-19 pandemic meant we were unable to test *Let's Talk* and conduct an initial phase of empirical experimentation, the EBCD approach allowed for theoretical experimentation within the small co-design team meetings. Each time we met, the intervention was refined based on either feedback from my PPI group, or facilitated discussions between the co-design team members. These discussions were strengthened by use of the BCW in two ways. First, reporting the intervention using the steps of the BCW approach enabled each component of the intervention to be explicitly described, with consideration and understanding of the potential theoretical mechanisms of action. Second, the APEASE criteria, developed to assist researchers in designing and evaluating interventions, enabled structured discussions that examined the affordability, practicability, effectiveness/cost effectiveness, acceptability, safety/side effects and equity of each intervention component and the intervention as a whole. Thus, we were able to collectively refine not only the intervention, but each individual component, until we were satisfied that *Let's Talk* addressed all the identified barriers to engagement.

9.5 Strengths and limitations of the research

The strengths and limitations of each phase of this PhD study have been included in the preceding chapters. The discussion presented here gives a broad overview of the strengths and limitations of the project overall.

9.5.1 Strengths of the work

Service user involvement

The work in this PhD put the service user at the heart of its design and conduct. Service user involvement significantly optimised the design of the intervention, resulting in an intervention toolkit that was innovative and more likely to be acceptable to service users. As intervention development was guided by the BCW, the intervention could have been developed from research evidence alone. This, however, would have been inadequate to inform its content and may have resulted in potentially important components being missed, which would negatively impact on both service users' and clinicians' experiences of using the intervention. An additional strength of this research was the input of PPI activities throughout the lifecycle of the project. This ensured that the project was rooted in the needs of service users from its conception and allowed a critical, expert by experience eye to assess the acceptability, useability and relevance of the intervention toolkit prototype prior to the planned phase of testing.

A combination approach

The MRC Framework for developing and evaluating complex interventions (Craig et al. 2008) and its additional steps suggested by Bleijenberg et al. (2018), provides a systematic and structured framework to enable researchers to best address the aims and objectives of intervention development studies (Creswell & Plano Clark 2010). In this work it provided a pragmatic, organised yet flexible basis to formulate a theory driven co-design behaviour change approach to developing and modelling the *Let's Talk* complex behaviour change intervention toolkit. Literature emphasises the importance of rooting complex interventions in evidence and theory (Michie et al. 2008, Clarke et al. 2010, Chalmers et al. 2014). As such, this work included an integrated systematic review, guided by behaviour change theory (Cane et al. 2012, Michie et al. 2014) to map out the research on therapeutic engagement, and develop a theoretical model of engagement to base intervention development from (Chapter 4, paper 1). These insights were further enhanced by service user, carer and clinicians' subjective experiences and inputs to highlight their specific needs (Chapter 5, paper 2). Their considerations for the content of an intervention to improve engagement was further guided by behaviour change theory (Michie et al. 2014) (Chapter 6, paper 3). This systematic, theory-driven integrated co-design behaviour change approach enhanced the intervention's replicability, reliability and relevance to the target population, which are commonly cited challenges for complex interventions (Craig et al. 2008, Michie et al. 2008).

9.5.2 *Limitations of the work*

Lack of input from clinicians

Lack of input from key stakeholders can compromise the intervention development process and result in interventions that are not relevant, usable or acceptable for the target population (Greenhalgh 2004). Although the input of clinicians was sought throughout the co-design process and they were able to meaningfully participate in the narrative interviews, feedback workshop and joint co-design workshop, their lack of input in the later small co-design team meetings may well be the most significant limitation of the project. This may also be compounded by the fact that the clinicians who were interviewed were not the clinicians who attended the feedback and joint co-design workshops. Although steps were taken to ensure everybody's views were accounted for, the lack of clinician presence throughout the small co-design team meetings may mean that the intervention does not fully consider the needs of clinicians. As this intervention is aimed at changing nurses' behaviour, the lack of input from nurses and other clinicians in the prototyping stages may result in an intervention that is less practical to use in their daily practice.

COVID-19

Closely related to the above, is the fact that COVID-19 prevented the intervention from being tested in practice. Some of the above limitations could have been mitigated by modelling the intervention with nurses in practice and gaining their perspectives on the useability and acceptability of the intervention. This may have resulted in refinements that were rooted in the nurses' needs and experiences of using the intervention with service users in practice. Unfortunately, as discussed above, this was made impossible due to COVID-19. However, as discussed earlier in Chapter 9, it is hoped that as part of my new role as Improvement Consultant, I can test the intervention through the means of a local quality improvement project on the intervention ward.

9.6 Implications and recommendations for clinical practice

The findings in this thesis allow for several recommendations to be made for clinicians and healthcare organisations. The work has demonstrated that therapeutic engagement can often be a challenge for nurses, particularly in the complex context of an acute mental health ward. Change is required at all levels of the system and this must be recognised and supported by those leading healthcare organisations. By meaningfully involving those who both deliver and receive care, transformational change can occur (Sangiorgi et al. 2019), however findings from this thesis suggest that this vision may be a long way off. Organisations must embed a culture of meaningful service user, carer and clinician involvement and offer relevant logistical and financial support to enable this culture to flourish. Doing so is likely to encourage a sense of joint ownership over change processes and improvement work, increasing the likelihood of uptake, sustainability and cost-effectiveness (Silver et al. 2016, Nilsen et al. 2020). It may also boost engagement and enjoyment in work at a time when retention of mental health nursing staff is a major challenge (Redknap et al. 2015).

While this research shows that nurses aspire to deliver therapeutic engagement, it is evident they may be underprepared and insufficiently supported to do so. More guidance on the content of therapeutic engagement is vital to improving service users' and nurses' experiences of engagement. Chapter 4, paper 1 emphasised the importance of having a shared language through which nurses and other healthcare professionals can articulate therapeutic engagement (McAllister et al. 2019). Prior to this study, there was a paucity of literature that clearly conceptualised therapeutic engagement. The conceptual model of engagement and accompanying "Principles of Engagement" have been found to reflect the experiences and needs of service users, carers and clinicians through empirical testing against data from the narrative interviews presented in Chapter 5, paper 2. Central and North West London NHS Foundation Trust have adopted these principles within their Trust policy on therapeutic engagement and observation. These principles will be useful for other organisations as a framework for articulating expected therapeutic engagement practices on acute mental health wards.

Chapter 6 presents an in-depth behavioural analysis of the problem of therapeutic engagement which clearly indicates that a multifaceted improvement approach is required. Chapter 4, paper 1 and Chapter 6, paper 3 highlight the plethora of barriers which create significant obstacles for nurses to deliver high quality therapeutic engagement. These barriers sit within the broad categories of capability, opportunity and motivation; thus, organisations must ensure they address all these categories to realise improvements to engagement. This will clearly be a challenge, particularly as many organisations face financial restrictions and expect clinicians to do more with fewer resources, which was a contention for the clinicians involved in this work. Going forward, organisations must work with service users, carers and clinicians to streamline working practices and implement interventions that work alongside nurses' daily routines, rather than expecting them to adopt initiatives that create a heavier workload. *Let's Talk* offers a toolkit of interventions, some of which can be implemented alongside nurses' daily routines and adds to the limited number of interventions that nurses can use to improve their therapeutic interactions with service users.

9.7 Implications and recommendations for healthcare professional education and development

The work in this thesis has highlighted the importance of involving service users and carers within healthcare development, including education and training for healthcare professionals. The experiential accounts of engagement given by service users and carers and shown in the training and trigger film clearly had a strong and moving impact on clinicians, many of whom said they had not experienced something like this before. Using such bespoke training materials to help clinicians understand the best ways to engage therapeutically with service users in their care may be more helpful than generic training that does not capture the human side of how to interact.

Although acute wards are often busy and understaffed (Deacon et al. 2006), it is imperative that time is put aside to allow clinicians to reflect on their practice and develop their skills. Many of the clinicians in this study said that being involved in this work was the first chance they had been given to reflect on their practice as a team and begin to formulate ways of improving it. Going forward, support should be provided to clinicians to undertake facilitated reflective practice workshops to help learn from their own experiences. It would be useful to involve service users within some of these workshops as a way of ensuring what is important to service users is at the forefront of what we do.

9.8 Implications and recommendations for future research

The findings from the work in this thesis have highlighted several implications for future research. There is an ongoing need to broadly improve the experiences, quality and safety of inpatient mental health services. Improving nurse-patient therapeutic engagement may be one way of doing this, however, the context of an acute ward is incredibly complex and participants in this study argued that therapeutic engagement was not solely the responsibility of the nurse. Future research using participatory, qualitative designs should explore how the multidisciplinary team can collectively improve therapeutic engagement to ensure service users, carers and clinicians have positive, safe and high-quality experiences when working and being cared for on acute mental health wards.

This research combined EBCD with the BCW to create an integrated co-design behaviour change approach for intervention development. To our knowledge, this has not been done before. Whilst the combination approach was acceptable to service users, carers and clinicians in this study, the approach will require further testing and potential refinement to ensure it is suitable and translatable to other improvement processes. Further, the BCW and to a lesser extent EBCD, necessitates the need for some expert knowledge. While this is no different to other approaches that use guidance or frameworks for intervention development, this study found that training a core group of service users in the application of EBCD was a useful approach to imparting expert knowledge within the co-design team. Of interest would be to see if the findings, outcomes and processes would have differed if members of the co-design team had also been trained in the application of the BCW. Training in the application of the BCW may be a useful addition to future research that employs this combination approach. However as discussed in Chapter 6, paper 3, it is vital that the training does not confuse or alienate participants and should only be given if a person expresses an interest in doing it.

The findings of this study and others (e.g., Raynor et al. 2020) indicate that involving clinicians in a one-off co-design process may not be enough to drive, support and sustain efforts to both implement changes and facilitate continuous development work. Clinician participation is fundamental to intervention design and more broadly to improving healthcare services (Nilsen et al. 2020). Although approaches like EBCD explicitly identify the continuous nature of improvement work (Bate & Robert 2007), future research must investigate the complex reasons behind why this type of work is not always sustained and continued within healthcare settings. There are currently attempts within the NHS to embed continuous improvement work within healthcare services, with many Trusts forming dedicated quality improvement teams whose role it is to work alongside service users, carers and clinicians to continuously improve services (e.g., O'Sullivan et al. 2020, CNWL 2021a). Future research should also focus on the processes and outcomes of these initiatives to further understand how and if continuous development work is an achievable goal for healthcare services.

This research has developed a complex behaviour change intervention with clear links to potential theoretical mechanisms of action. As was initially planned, but paused due to COVID-19, future research should continue the evaluation of *Let's Talk* to both empirically test the potential links between intervention content and their mechanisms of action and understand the feasibility, usability and acceptability of *Let's Talk* in practice. This will facilitate further refinements of the intervention and a greater understanding of how, why and if it will bring about improvements to the amount and quality of nurse-patient therapeutic engagement. This may lead to a definitive RCT which would assess the efficacy of *Let's Talk* and understand whether an intervention co-designed by service users, carers and clinicians from one ward could be successfully implemented and show improvements to other wards not involved in the co-design process. With the current political and organisational drivers for cost savings, it is important that interventions are cost-effective. An in-depth economic evaluation that calculates costs and cost-effectiveness should also be included within the definitive RCT.

9.9 Thesis conclusions

This PhD has provided unique and important contributions to the literature on therapeutic engagement, Experience-based Co-design and the Behaviour Change Wheel approach to intervention development. Thesis findings have conceptualised nurse-patient therapeutic engagement on acute mental health wards and developed a model of engagement that describes five "Principles of Engagement" associated with high quality therapeutic engagement. Verifying the model of engagement with service users, carers and clinicians has confirmed its applicability in a real world setting and provides a useful framework for healthcare organisations to articulate high quality engagement practice (e.g., CNWL 2021b).

Findings have also shown that the "Principles of Engagement" are positively and negatively influenced through a myriad of factors that sit within a nurse's capability, opportunity and motivation to engage. These factors were targeted within a complex behaviour change intervention to improve therapeutic engagement called *Let's Talk*. The behaviour change strategies identified in *Let's Talk* do not require large amounts of money or sophisticated technology to develop and implement; however, they require service users, carers and clinicians to work together to further develop, iteratively test and implement the strategies in practice.

Previous research has shown that EBCD and the BCW are both feasible and acceptable approaches to intervention development (O'Cathain et al. 2019a). This PhD study has provided the opportunity to combine and implement an integrated co-design behaviour change approach to intervention development. It has shown that the EBCD and BCW approaches are compatible and allow for a synergist process where the BCW provides the behavioural tools to guide intervention development whilst EBCD enables the means for its collaborative application and may potentially bring about changes in clinicians' behaviour that are independent from the co-designed intervention.

Integrating EBCD and the BCW enhances both approaches and makes a timely and novel contribution that builds on both participatory methods for intervention development and behaviour change theory.

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APPENDIX A

A1 – Supplementary material from Chapter 4, paper 1

A.1 – Search terms and facets for CINAHL

Facet 1: Setting	A N D	**Facet 2: Perspectives**	A N D	**Facet 3: Intervention/Phenomenon**
MM "Hospitals, Psychiatric" OR acute psychiatric OR mental health inpatient		MH "Psychiatric Nursing+" OR “mental health nurs*” OR “psychiatric nurs*” OR patient*		MM "Nurse-Patient Relations" OR therapeutic OR engagement OR activity OR interaction* OR “nurse-patient contact” OR “one-to-one” OR 1:1

A.2 - Study characteristics table

Author/Year/Country	Aims	Methods	Sample/Setting	Constituents/Concepts	Influencing factors
Anderson, (1983) USA	Specifying psychosocial nursing interventions	**Design:** Expert opinion	N/A	- Psychosocial nursing interventions are often too broadly defined to give indication as to what the nurse actually did - Engagement consists of listening to patients concerns, helping patients to clarify own thoughts and feelings. - Nurses will not tell patients what to do, rather they will help patients to explore different ways of dealing with their concerns	- Therapeutic engagement techniques will be different for each patient dependent on their own personal needs - Using general terms to describe engagement may lead to trial and error approach by the nurse, therefore disrupting consistent care, and making room for other nurses to try the wrong approach with a patient
Andes and Shattell (2006) USA	To explore the meanings of space and place in acute psychiatric settings, to discuss how these meanings affect human relationships, nurses' work environment and patients' perception of care, and to present how the design and use of nursing stations affects therapeutic relationships	**Design:** Expert opinion	N/A	**-** Working through problems *with* patients	- Physical barriers cut off patients' access to nurses - Nurses: impoverished view of personal efficacy, difficult to face the uncertain outcomes of engagement, private areas, existential dilemma to distance themselves yet relate to patients - Short length of stay, high acuity - Frequent "intrusions" by patients at the nursing station
Awty et al. (2010) Australia	Exploration of perspectives and expectations of psychodynamic therapeutic care for experienced and practicing mental health nurses	**Design:** Qualitative naturalistic inquiry **Data collection:** Semi-structured interviews **Data analysis:** Naturalistic inquiry	**Sample:** Purposive sample of 10 mental health nurses **Setting:** Nurses must have had experience in acute inpatient psychiatric care	- Psychodynamic approach to care - Being there in times of crisis - Facilitating intrapersonal change and growth - Work with patients to construct a mental map - Assist in an active and self-determining role in coming to terms with their illness experience - Confronting patients fears, doubts and uncertainties - Witness to, catalyst, facilitator, guide and companion to person throughout their illness - Patient ultimately knew the path to becoming well	- Being smothered by bureaucracy - Lack of resources - Preoccupation with control - Lack of support advocating for patients - Putting the needs of the system before that of the patient - Custodial approaches to care - Subjectivity of engagement - Short hospital stays enables brief encounters where nurses may not have the time to build up relationship necessary or see the good results to feel engagement is useful - Reconfiguration of value priorities e.g. psychodynamic to custodial care - Unpredictability of patient illness - Nurses unable to articulate what they do

Author/Year/Country	Aims	Methods	Sample/Setting	Constituents/Concepts	Influencing factors
Bee et al. (2006) UK	To map, classify and compare activity patterns for qualified and unqualified nurses acute mental health inpatient wards	**Design:** Mixed-methods **Data collection:** Short repeated interviews conducted on an hourly basis with all available staff **Data analysis:** Qualitative data by thematic content analysis and quantitative data analysed by inferential statistics	**Sample:** 40 qualified mental health nurses and unqualified nursing assistants **Setting:** 3 regional acute mental health wards in the UK	- Therapeutic care refers to any period of time that the sole activity was to provide structured or formal patient therapy - Direct patient contact (health, social and therapeutic care) - Providing general reassurance	- Staff grade - Satisfaction with work - Administrative tasks
Berg and Hallberg, (2000) Sweden		**Design:** Qualitative **Data collection:** Narrative interviews **Data analysis:** Latent content analysis	**Sample:** Whole population sample of 22 nurses (10 registered nurses, 10 licensed mental practical nurses, one licensed practical nurse and one nurse's aide) **Setting:** General acute psychiatric ward	- Nurses had trouble grasping what "psychiatric nursing care" really meant: "Ordinary things", "wholeness" - Developing a working relationship with the patient in every day caregiving - Being there (psychologically, physically, existentially, socially, attending to requirements of patient) - Being with and doing for - Two approaches: 1) dominant (nurse as the expert, knowing the best solution to patients needs 2) collaborator (mutual cooperation in exploring patients' needs) - Supporting patients' independence in ADLs, social interactions, skills, planning for the future - Teaching approach (instructing, training, structuring, encouraging patient to develop abilities) - Containing approach (holding and carrying emotional tension for the patient) - Protecting approach (provide comfort, relief, balancing rest and activity, setting day and night rhythm)	- Lack of clarity about what type of care should be given - Language barriers e.g. when patients cannot speak native language - Work environment e.g. lack of support and participation from head nurse and favouritism - United approach to patient care was lacking - Insecurity about how to approach patients - When patients give little in the way of verbal responses - High expectation from patients - Nurses are busy with their own roles and activates that patients can take second place - Engaging can affect nurses as a person - Different patient presentations - Ability to handle the unforeseeable - Handling their own feelings of fear, powerlessness, sorrow - Self-awareness - Having patience - Ability to understand non-verbal cues and actions from patients
Björkdahl et al. (2010) Sweden	To describe the caring approaches of nurses working in acute psychiatric intensive care wards	**Design:** Qualitative **Data collection:** Interviews **Data analysis:** Interpretive description method	**Sample:** Purposive maximum variation sample of 19 nurses (10 registered, 9 nursing assistants)	- Caring approaches was used to describe engagement - Two approaches: 1) Nurse must be sensitive and perceptive 2) Guardians of safety	- Nurses adapt their "caring approaches" to the needs and/or behaviours of particular patients - Putting yourself in patients' shoes - Empathy - Patients' condition

Author/Year/Country	Aims	Methods	Sample/Setting	Constituents/Concepts	Influencing factors
			Setting: 4 Psychiatric Intensive Care Units in urban and rural settings in Sweden		- Priority may need to be given to ward safety - Threatening behaviour from patients - Task orientated
Bowers et al. (2009) UK	To describe how expert nurses use their experience and skills to maintain therapeutic interactions with patients who are psychotic	**Design:** Qualitative exploratory study **Data collection:** Semi-structured interviews **Data analysis:** Coding and grouping	**Sample:** Purposive, then snowball sample of 29 expert mental health nurses **Setting:** 75% came from community	- Interaction techniques could be divided into seven natural domains 1) the moral foundations for interacting; 2) preparation; 3) being with the patient 4) non-verbal aspects; 5) emotional regulation 6) getting things done 7) talking about symptoms (look at diagram in paper for this) - Simply "being with" the patient	- Preparing for interaction - Knowledge of patient - Location of interaction - Allow patients to psychologically prepare for the interaction - Having normal conversation/ordinary interactions - Engaging through an activity - Using humour - Shared humanity and opening up about nurses' own past experiences - Time of day
Bowles, (2000) UK	Critical examination of the role of psychiatric nurses in providing therapeutic care within acute psychiatric admission wards	**Design:** Expert opinion	N/A	None reported	- Clinical environments with multiple and conflicting demands - Overuse of control - Inadequate resources - Paperwork and administrative duties - Bed management duties - Potential risk for violence - Increased use of medication and seclusion - Skilled nurses may leave inpatient to work in community - Supportive organisational conditions must be in place
Bowles et al. (2002) UK	To refine the meaning of engagement and present it as a process of emotional and psychological containment of distress	**Design:** Expert opinion	N/A	- Engagement is a process of emotional and psychological containment of distress - Engagement is not the prerequisite of highly trained staff and is not necessarily therapy rather it is just caring, the development of empathy, or just being with rather than looking on	- Emotional labour - Risk focused - Formal observations - A "compliant" patient may not get spoken to for days on end
Bray, (1999) UK	Investigate what is a beneficial relationship between the nurse and the patient; 2) Construct the meaning of professional closeness for the trained	**Design:** Qualitative ethnographic design **Data collection:** Participant observations, overt observations, semi-	**Sample:** Opportunistic, nurses and patients for observations and 15 nurses for interviews **Setting:** 3 wards from a	- Professional closeness - Groups create a connection between nurse and patient and that creates open dialog and conversation - Groups were viewed by some nurses as frivolous and not "real" work	- Nurses get "the brunt of it" - Emotional labour - Abuse and violence - Paucity of known empirically tested and effective treatments

Author/Year/Country	Aims	Methods	Sample/Setting	Constituents/Concepts	Influencing factors
	nurse; 3) Under what circumstances has professional closeness occurred? 4) What factors have prevented this happening?	structured interviews and informal discussions **Data analysis:** Ethnographic methods as per Cooke 1998.	rural hospital with rural and urban catchment area.	- Get to know the patient through their illness - "Sharing in the patient's daily life, - Observing and communicating in the course of other activities - Piecing together a picture of the patient from fragments of information	- Do not have the skills to engage in the way they should - Emotional and cognitive tiredness - Rejection of nurses' work by patients who are very unwell - Seeing improvements - Having similar life experiences - Sharing personal stories - Empathy - Reframing negatives as positives
Cameron et al. (2005) UK	To explore the therapeutic potential of the psychiatric nurse	**Design:** Expert opinion	N/A	- Interpersonal, transactional process that aims to affect a positive change - No sound theory to inform therapeutic interactions - Getting to know and understand the predicament of the patient using reflective practice and personal awareness - Explore function and meaning of behaviour and experiences - Psychodynamic models of care	- Ward administration - Acuity of illness - Patients' past experiences and traumas
Chiovitti, (2008) Canada	To develop a substantive grounded theory of caring from the perspective of Registered Nurses working with patients in three Canadian acute psychiatric hospital settings	**Design:** Qualitative grounded theory **Data collection:** In-depth interviews with Registered Nurses were conducted using theoretical sampling. **Data analysis:** Constant comparative analysis	**Sample:** Theoretical sampling approach of registered Nurses (*n* = 17) licensed with the College of Nurses of Ontario. **Setting:** Three urban, acute psychiatric hospital settings in Canada. Two were general hospitals and one was a psychiatric hospital.	- Respecting the patient through acknowledging their suffering and distress, being non-judgemental, not power tripping over patient, viewing the patient as knowledgeable - Responding to patients' concerns of daily living - Role modelling e.g. showing patients how to do things through interactions - Providing feedback	- Knowing the patient - Talking to colleagues or reading articles about patients' condition so they know how to approach them - Shared understanding - Empathy - Nurses' own personal space - Acuity of illness
Cleary and Edwards (1999) (paper 1) Cleary et al., 1999 (paper 2) Australia	To explore factors that facilitate and/or impede nurse–patient interaction in the acute psychiatric setting	**Design:** Qualitative **Data collection:** Semi-structured interviews **Data analysis:** Thematic content analysis	**Sample:** 1. 10 nurses and 10 patients and 2. Same 10 nurses **Setting:** 22-bed acute psychiatric admission ward in Australia	- Behaviour of the nurse as a person interacting with the patient as a person - Providing assistance - Information giving - Problem solving - Answering questions - Helping to plan the day - Interacting in a social way - Setting limits on behaviour	- Environmental factors (ward size, layout) - Unpredictable/chaotic nature of ward - Some nurses lacked the confidence to engage therapeutically - Acuity of patients' illness - More acutely unwell patients' needs were prioritised, but their needs didn't always involve engagement

Author/Year/Country	Aims	Methods	Sample/Setting	Constituents/Concepts	Influencing factors
					- Staffing ratios and large patient numbers - Too busy to help - Changing population of patients - Ward activity programme encouraged nurse-patient interaction - Positive and fresh outlook for each new shift - Positive interactions between staff facilitated positive interactions with patients - Education (however this could detract from the availability of time for patients) - Good teamwork - Unit culture - Support of senior staff - Primary nurse (some believe it was good, some believe it impedes)
Delaney et al. (2017) USA	To present a model of engagement that clarifies the skills to support the engagement process	**Design:** Expert opinion	N/A	- Process needed to grasp and validate the patient's experience - How nurses are thinking, sensing and responding to patients - Responding to individual who is unwell - Deciphering and understanding patterns - Work with the patient to create positive change - Connect with the patient and see meaning in the patient's lived experiences - Model of engagement: 1) centre yourself 2) send intent/here to listen 3) establish empathetic bridge 4) attunement 5) understand the story 6) crafting a response	- Administrative duties - Communication with other agencies - Maintaining a safe environment - Chaotic milieu (firefighting) - Patients feel nurses want to maintain distance - Engagement priorities based on ward culture - Nurses internal experiences impact on their ability to engage
Edwards et al. (2008) UK	To investigate the implementation of protected time on an acute inpatient mental health ward	**Design:** Mixed-methods design **Data Collection:** Questionnaires (likert scale with space for open ended comments)	**Sample:** Convenience sample of 16 nurses and 17 **Setting:** 4 acute inpatient wards in London	None reported	- Nurses' time was predominantly taken up by "firefighting" - One-to-one sessions are not seen as vital or regular to the nurses' working day - Lack of staff - Supervision was inconsistent and didn't focus on how to improve one-to-one sessions - Some patients complained about the

Author/Year/Country	Aims	Methods	Sample/Setting	Constituents/Concepts	Influencing factors
		Data analysis: Does not state how they analysed the data - presented it as verbatim accounts and leaves the reader to make their own interpretation			setting of engagement - Patients don't want to engage
Forchuk and Reynolds, (2001) Canada and UK	To explore the question 'How do clients perceive the evolving therapeutic relationship with nurses?'	**Design:** Comparing the results of two qualitative studies from Canada and Scotland **Data collection:** Canadian study – Interviews Canadian study – questionnaires **Data analysis:** Reflective case study, comparing Canadian and Scottish study	**Sample:** Canadian study – 10 nurse-client dyads Scottish study – 30 service-users **Setting:** Canadian study – Tertiary care psychiatric facilities Scottish study – acute psychiatric settings	**Concepts:** - Understanding the perceptions and needs of the patient - Empowering the patient to learn, or cope more effectively with their environment - Reduce and resolve patients' problems	- Mutual avoidance of engagement - Judgemental behaviour - Getting to know the nurse/knowing the nurse for a longer period enabled patients to talk more to their nurses - Having a sense of connectedness improves - Different engagement techniques for different parts of the relationship - Having a passion for their work - Tone of voice can convey good or bad feelings
Gijbels, (1995) UK	To explore the perceived therapeutic skills of mental health nurses	**Design:** Qualitative descriptive study. **Data collection:** Semi-structured interviews **Data analysis:** Thematic content analysis	**Sample:** Volunteer sample of 8 nurses, 8 non-nurses psychiatrists, OTs and SWs **Setting:** Acute mental health admissions ward in a district general hospital.	- Jack of all trades, few suggestions of nurses being an independent therapeutic agent - Unique role of "being there"	- Ideological differences of care, - Administrative duties - Organisational structures Personal inabilities and unwillingness - Environmental unsuitability - Managerial pressures - Firefighting - Effects of medication - Interactions are *ad hoc* and done in passing
Gurel, (1963) Country unknown	To explore the Psychotherapy Model of Nurse-Patient relationships	**Design:** Expert opinion	N/A	None reported	- Nurses are deterred from engaging because they think it needs to be specially formulated conversation - Nurses feel they lack the skills to engage - Uncomfortable with being with patients other than in procedurally structured situations - Adoption of a psychotherapeutic approach to nursing has made nurses feel that ordinary interactions are not valid and not helpful to

Author/Year/Country	Aims	Methods	Sample/Setting	Constituents/Concepts	Influencing factors
					patients - Ward philosophy - Extent of required duties
Hargreaves, (1969) USA	To examine the overall rate of nurse-patient contact, looking at characteristic individual differences in interaction rates of particular nurses and patients.	**Design:** Quantitative observational study **Data collection:** 2 sets of time sampled observations over an 8 week period. **Data analysis:** Descriptive statistics	**Sample:** Nurses and patients resident on the ward at time of observations **Setting:** 26 bed, mixed sex general acute adult ward	-Use the word interaction and contact to describe TE - Complex web of interrelated events - In conversation or activity with patient/staff - Formal meeting including patient - Accompanying individual patient off ward	- Gender - Ward culture - Time of day - Seniority of nurses - Individual characteristics
Heifner, (1993) USA	Explore how psychiatric nurses experience positive connectedness in the nurse-patient relationship	**Design:** Exploratory, descriptive, qualitative design **Data collection:** Structured interviews **Data analysis:** Glaser and Strauss's grounded theory method	**Sample:** Convenience sample of 8 mental health nurses **Setting:** Acute psychiatric mental health settings	- A feeling of connectedness to the patient	- Nurse shows vulnerability - Feeling valued by the patient - Finding commonalities of experience - Relating personally enhanced effectiveness of nurses work
Hem and Heggen, (2003) Norway	Examine nurse-patient interaction and combining the role of health professional with that of fellow human being.	**Design:** Ethnographic research design **Data collection:** Participant observations/field notes and narrative interviews **Data analysis:** Case descriptions analysed according to "how do nurses handle the contradictory demands of being both fellow human and health professional?"	**Sample:** 1 nurse from the original sample of 6 **Setting:** 5-bed locked ward in Norway	- Combining the role of health professional with that of fellow human being - Balance between human closeness and professional distance	- Nurses may feel constrained by "text book" ways of interacting - Seeing something in a patient encourages engagement e.g. vulnerability - Understanding of a patient on their own terms - Creating "something" together - Empathy - Self-awareness on the nurses' front - Contradictory demands of being both fellow human being and health professional (how do nurses grapple with this?) - Signals received by co-workers may dictate the type of interactions a nurse has - Experiencing and showing your own vulnerabilities - Emotional toll of engaging
Keltner, (1985)	Defining what psychiatric nurses do and	**Design:** Expert opinion	N/A	- Communication of respect and understanding to another person, and the	- When a nurse understands therapeutic communication as just part of the larger

Author/Year/Country	Aims	Methods	Sample/Setting	Constituents/Concepts	Influencing factors
Country unknown	making a distinction between giving therapy and being therapeutic			desire and confidence to help - Kindness, empathy, trustworthiness, hope-arousal, acceptance, compassion, integrity, maturity, willingness to listen are essential components the nurse must show - Providing the patient with a consistent adult relationship - Testing interpersonal skills on a "safe" person	mosaic, then there are fewer feelings of frustration
Koivisto et al. (2004) Finland	Explore how to make nurse-patient interaction more open to psychotic patients' experiences	**Design:** Qualitative descriptive phenomenological approach **Data collection:** Semi-structured interviews **Data analysis:** Giorgi's phenomenological method	**Sample:** Purposive sample of 9 patients recovering from psychosis **Setting:** Psychiatric university hospital in northern Finland	- Every comment a nurse makes to a patient or within hearing distance can have therapeutic or non-therapeutic value - Using self as a therapeutic agent - Protection from vulnerability - Restructuring/empowering of self to cope in everyday life - Nurses "helping" methods - Systematic and continuous contacts with the patient, knowledge of the patient's real condition and a process of consciously reflecting on the interaction with the patient" - Being present - Give concrete information to patients about their psychotic experiences - Help to manage in daily life - Help to get rid of "strange" feelings	- Calling patient by their name - Tone of voice - Timing/place of interactions - The language used in interactions - Ward milieu - Not enough time/nurse too busy - Knowing when to engage
Latvala and Janhonen, (1998) Finland	To describe the helping methods used in psychiatric patient care in a hospital environment.	**Design:** Qualitative **Data collection:** Videotapes of nursing situations and interviews with nurses and patients **Data analysis:** Deductive content analysis	**Sample:** 29 nurses and 16 patients **Setting:** in and out patient care situations	- Helping methods - Nurse patient collaboration - Understanding a person - 3 types of helping behaviour: Catalytic helping methods, Educational helping methods, Confirmatory helping methods	- Everyday activities may be meaningful, but it depends on patients' state of mind and motivation for engaging - Empathy
Mackay et al. (2005) UK	Exploration of the rules of 'engagement' for the nurse caring for the patient at risk of violence or aggression	**Design:** Qualitative **Data collection:** In-depth unstructured interviews **Data analysis:** Thematic content analysis	**Sample:** Purposive sample of 17 mental health nurses **Setting:** Psychiatric intensive care unit	- Observation requires engagement - De-escalation and management of violence - Containing as therapeutic (for a short time) - Being there - Information giving - Giving and receiving feedback - Discussing	- Nurses need the right skills to be engage while observing patients - Experience helped with engagement

Author/Year/Country	Aims	Methods	Sample/Setting	Constituents/Concepts	Influencing factors
				-Negotiating	
McAllister et al. (2004) Australia	This paper describes, analyses and reconstructs early encounters between nurse and client.	**Design:** Case study **Data collection:** Re-examination of own first encounters between nurse and patient **Data analysis:** Analysed own first encounters with patients by using critical theories/critical reflection	**Sample:** University researcher's colleagues in various clinical settings **Setting:** Unclear	- "Encounters" - 5 rights of engagement - Offering an illusion of - Engaging through an activity - Sitting quietly with a cup of tea	- Good first impressions - Meaningful connections - Relating as a fellow human being - Using tools to facilitate engagement - Formalising engagement - Overuse of control - Unsuitable environment - Emotional toll - Effects of illness
McAllister and McCrae, (2017) UK	To investigate the actual and potential therapeutic role of nurses in a psychiatric intensive care environment.	**Design:** Mixed-methods concurrent triangulation design **Data collection:** Semi-structured interviews and quantitative observations **Data analysis:** Thematic analysis and descriptive statistics	**Sample:** Purposive maximum variation sample of 4 clinicians and 6 patients and whole population sample for observations **Setting:** 14 bed male PICU in London	- Difficult to define the therapeutic role of the nurse - Engagement conceptualised as an ecological issue - 4 distinct forms of nurse-patient engagement (ad hoc, para-instrumental, social-recreational, dedicated engagement - Impromptu conversations - Patient/nurse requests - Interactive close observations - Interactive meal times - Individual 1:1s	- Streamlining of paperwork - Working together as an inclusive team of patients and nurses - Organisational stressors - The work is very tough, demanding, exhausting - Type and amount of engagement was directly influenced by the interactions, relationships and characteristics of and between clinicians, patients and the - Both nurses and patients need to make an effort, if one of them doesn't then it will influence engagement - Time of day - Managerial/organisational pressures/priorities - Love (for the job and for the individual patient)
McCrae, (2014) UK	Discussion of barriers to implementing protected engagement time within acute mental health inpatient units	**Design:** Expert opinion	N/A	None reported.	-Bureaucratic burden, under staffing, increased proportion of patients, detained under the MHA - Time barriers i.e. short stays - Close proximity of nurses and patients on acute wards - Emotional toll - Nurses need better training and guidance on therapeutic engagement - More contact with least qualified members

Author/Year/Country	Aims	Methods	Sample/Setting	Constituents/Concepts	Influencing factors
					of staff - Effects of medication - Acuity of illness
Miller, (1964) USA	Existing conditions of state hospital psychiatric nursing are discussed, highlighting some reasons for the difficulty in change from a custodial to therapeutic orientation	**Design:** Expert opinion	N/A	None reported.	- Many competing demands on nurses' time - Emotional toll - Listening can strain the limits of empathy which is important for engagement - Need to embrace change and not keep going on the same way - Patient presentation - Interaction through an activity - Organisational culture
Morrison et al. (1996) USA	To operationalise Peplau,'s work roles and investigate what work roles are evident during nurse-patient interaction in a psychiatric setting	**Design:** Qualitative descriptive design **Data collection:** Nurses audio recorded their one-to-one interactions with patients **Data analysis:** Content analysis (data were compared to pre exisiting categories as well as examined for categories not designated in advance)	**Sample:** Convenience sample of 37 RMNs, with 30 who submitted usable audio recordings with 62 patients (25 nurses and 49 patients from adult units, the rest from child or adolescent units). **Setting**: Four hospitals located in an urban area. One facility was a psychiatric hospital, the other three were general hospitals with a psychiatric unit	*Work role types:* - Stranger, resource person, teacher, leader, surrogate, counsellor, friend	- Variety of roles as the interpersonal relationship progresses
Peplau, (1992) USA	Present some major features of the theory of interpersonal relations	**Design:** Expert opinion	None reported.	- Joint effort between nurse and patient e.g. identification of the presenting problems, understanding the problems and their variations in patterns and appreciating, applying and testing remedial measures in order to produce beneficial outcomes for the patient - Promotion of favourable changes in the patient - Health teaching - Nurse-as-a-person interacting with the patient-as-a-person - Four main components: two persons, professional expertise and client need	- Understanding theory and processes helps to facilitate the therapeutic interaction and the choices that the nurse makes within the interactions - The scope of therapeutic interactions includes, but is not limited to the relationship of the persons involved - Nurse behaviours serve as stimuli for evoking behavioural changes by patients - Technical and soft skills

Author/Year/Country	Aims	Methods	Sample/Setting	Constituents/Concepts	Influencing factors
				- Observe, interpret what they notice, and then decide what needs to be done	
Pereira and Woollaston, (2007) UK	To gain a greater understanding of how therapeutic engagement is successfully achieved and maintained on psychiatric wards.	**Design:** Qualitative exploratory **Data collection:** Focus groups **Data analysis:** Thematic analysis	**Sample:** Staff from the participating wards **Setting:** Acute psychiatric wards that were functioning to high standards in regards to successful therapeutic engagement	- Engagement is not the prerequisite of highly trained staff and is not necessarily 'therapy'; it is simply what some staff would recognise as caring, the development of empathy or just being with rather than looking o	None reported.
Roche et al. (2011) Australia	This study explored a model about a nurse's ability and willingness to engage in a therapeutic relationship	**Design:** Model testing design **Data collection:** A nursing survey and ward profiling developed for this study. **Data analysis:** Data were analysed using a partial least squares technique.	**Sample:** Convenience sample of 76 nurses **Setting:** Six mental health nursing units in five public general acute hospitals in New South Wales, Australia	- Development of patients' understanding of themselves and their health - Therapeutic commitment (practitioners' ability and willingness to engage therapeutically)	- Nurses' perception of their support and competency influences their ability and willingness to engage - Role support, role competency and therapeutic commitment were related and impact on nurses' ability and willingness to engage therapeutically - Environmental and individual factors
Sebergsen et al. (2016) Norway	To explore and describe how the mental health care provided by nurses was experienced by persons with psychotic illness in acute psychiatric wards.	**Design:** Qualitative **Data collection:** Qualitative interviews **Data analysis:** Content analysis	**Sample:** Purposive sample of eight women and four men aged 18 to 64 years participated. **Setting:** 4 acute psychiatric wards at 2 general hospitals. Each 10- to 12-bed ward provides short-term treatment and care (for a mean of 10 days) to women and men experiencing acute mental illness.	- Confirming mental health care acts - "peaceful communication" e.g. being with, using few words, but still engaging non-verbally	- Difficult for patients to articulate what they need in acute phase of illness - Acuity of illness - Patients needed different confirming mental health care depending on what stage of their illness they were in
Talseth et al. (1999) Norway	To illuminate the meaning of suicidal psychiatric in-patients' experiences of being cared for by mental health nurses.	**Design:** Qualitative **Data collection:** Narrative interviews	**Sample:** Service-users 9 men and 12 women who were admitted due to suicidal ideation	- "Confirmation" by nurses in all interactions - Often enough just to say a few words to a nurse after one has got into bed - Therapeutic engagement came under the broad term of "care" which incorporated	- Patients found it helpful when nurses initially made the first contact - Giving basic bodily care allows for good opportunity to engage therapeutically - Acuity of illness

Author/Year/Country	Aims	Methods	Sample/Setting	Constituents/Concepts	Influencing factors
		Data analysis: Phenomenological-hermeneutic method	**Setting:** Psychiatric institution in Norway, 5 wards - emergency ward, sub-emergency wards, psycho-geriatric ward	other nursing activities such as sleep and bodily hygiene, feeding etc. - Therapeutic engagement was broken down into the terms "seeing people" "having time for patients" "being with patients" "listening to patients" "being open to patients" "accepting patients feelings" "communicating hope to patients" (all confirming acts) - Engaging through a task	- Avoidance - Little time for patients to talk to nurses as they were busy with other tasks
Whittington and McLaughlin, (2000) UK	To quantify the time spent by psychiatric nurses in a range of work-related activities, with particular emphasis on potentially psychotherapeutic one-to-one interactions with patients.	**Design:** Quantitative observational **Data collection:** Observations using the Nurses' Daily Activity Recording System (NURDARS). **Data analysis:** Descriptive statistics	**Sample:** 20 staff nurses **Setting:** 3 acute admissions wards in Northern Ireland.	- Purposive, structured communication with the patient whether the approach adopted is psychodynamic, cognitive or behavioural, group or individual - Talking to patients - Group therapy - Interactive close observations - Social conversation (was not considered to be psychotherapeutic) - Individual therapy (explaining procedures or future evets, patients progress, psychosocial difficulties)	- Formal and less formal interactions affect each other - Education and training - Seemingly obvious opportunities for psychotherapeutic interaction was not exploited

A.3 – Nursing roles and techniques nurses use to carry them out

Role type	Engagement techniques Example and purpose of role	Relevant evidence
Stranger	Formal address e.g. Mr/Mrs	Morrison et al., 1996
	Takes nursing history	Morrison et al., 1996
	Provides orientating information	Morrison et al., 1996
	Trying to gain an accurate understanding of patient	Forchuk and Reynolds, 2001
Sensitive	Trust building	Björkdahl et al., 2010, Forchuk and Reynolds, 2001
	Consoles and sympathises	Morrison et al., 1996, Sebergesen et al., 2016
	Shares personal experiences	Morrison et al., 1996
	Reassures	Sebergesen et al., 2016
	Social chit chat	Berg and Hallberg, 2000, McAllister and McCrae, 2017
	Being with	Mackay et al., 2005
Collaborator	Mutual cooperation	Berg and Hallberg, 2000
	Participatory dialogue	Latvala and Janhonen, 1998
	Meaningful activities	Latvala and Janhonen, 1998, McAllister and McCrae, 2017
	Assists with ADLs	Berg and Hallberg, 2000, Morrison et al., 1996
	Allow patient shared accountability in their care	Latvala and Janhonen, 1998
Committed	Extended periods of one-to-one interaction	McAllister and McCrae, 2017
	Non-judgemental	Morrison et al., 1996
	Asks about feelings or reactions	Morrison et al., 1996
	Investigates in non-directive way	Morrison et al., 1996
Instrumental Information giver	Answers questions	Mackacy et al., 2005, McAllister and McCrae, 2017, Morrison et al., 1996
	Arranges things on behalf of the patient	Berg and Hallberg, 2000, McAllister and McCrae, 2017, Morrison et al., 1996
Dominant	Nurse as expert	Berg and Hallberg, 2000, Latvala and Janhonen, 1998
	Giving the best solution	Berg and Hallberg, 2000, Latvala and Janhonen, 1998
	Instructing, explaining and teaching	Berg and Hallberg, 2000, Morrison et al., 1996
	Encourages patient to develop abilities	Berg and Hallberg, 2000, Latvala and Janhonen, 1998
	Help patients to manage a health behaviour	Latvala and Janhonen, 1998, Morrison et al., 1996
	Doing for	
Container	Holding and carrying emotional tension	Berg and Hallberg, 2000

Being there when desperate feelings are expressed	Berg and Hallberg, 2000
Structure, force and coercion	Björkdahl et al., 2010
Setting limits on behaviour	Cleary et al., 1999a, 1999b; Mackay et al., 2005

A.4 – Influential factors identified from the literature mapped to COM-B and the Theoretical Domains Framework (Michie et al. 2014)

*(green: high potential for intervention targets, orange: behaviour dependent on another behaviour, red: difficult to target)

COM-B		TDF Domains	Category	Nurse-related factors	Patient-related factors
CAPABILITY	Physical	Skills	*Nurses' personal resources*	Nurses must find creative ways to engage with people who are unwell.	
				Some nurses lack the skills needed to engage.	
				Nurse tries to find meaning in patients' experiences by figuring it out together.	
				Nurses do not exploit all opportunities for engagement.	
	Psychological	Knowledge	*Nurses' personal resources*	Knowing oneself and one's emotional triggers and limits protects the nurse from psychological harm and burnout.	
				Impoverished view of personal efficacy, lack of confidence or skill.	
				Nurses must know when to engage or keep their distance.	
				Nurses must be gentle with patients and allow them time to prepare for emotionally challenging conversations.	
				Nurses should use inclusive language when speaking to patients e.g. "we" so patient knows others have felt this before.	
				Nurses must know when to engage or keep their distance.	
			Patients' personal resources		Patient thinks nurse does not know how to help them so disengages.
					Patients may not speak the language.
		Memory, attention, decision process	*Organisational climate and culture*	Nurses are given increasing amounts of administrative tasks to complete.	
				Many competing demands, so nurses put the needs of the system before that of the patient and do not follow through with engagement.	
				Chaotic environment means nurses are responding to issues when they occur, rather than planning therapeutic encounters.	
			Patients' personal resources		Patients may give little in the way of verbal responses.
					Patients may have a short attention span when unwell.
					Patients may find it difficult to contain their emotions.
				Engaging regularly encouraged future engagement.	
OPPORTUNITY	Social	Social influences	*Organisational climate and culture*	Nurses did not show a united approach to patient care.	
				Nurses are given increasing amounts of administrative tasks, as the organisation does not prioritise engagement.	
			Nurses' personal resources	Trusting relationships were needed for nurses to self-disclose.	
			Patients' personal resources		For engagement to flourish, patients needed to trust their nurse.
			Safety and infrastructure	Nurses did not want to engage as they were fearful of physical violence.	Patients stayed in their rooms due to fear of physical attack.
	Physic	Environmental context and resources	*Organisational climate and culture*	Nurses can only have brief encounters with patients as turnover is high.	
				No time to build up the therapeutic relationship.	Patients felt there was not enough time to get to know their nurse.

COM-B		TDF Domains	Category	Nurse-related factors	Patient-related factors
				Nurses are given increasing amounts of administrative tasks to complete.	
				Understaffing.	
				Many competing demands, so nurses put the needs of the system before that of the patient and do not follow through with engagement.	
				Chaotic environment means nurses are responding to issues when they occur, rather than planning therapeutic encounters.	
					Patients find it difficult to speak to a nurse who does not have time to engage with them.
			Nurses' personal resources	Rate of engagement varied according to individual staff characteristics e.g. age, experience, seniority.	
			Patients' personal resources	Interaction through a shared activity enhances engagement.	Interaction through a shared activity enhances engagement.
			Safety and infrastructure	Nurses do not have a quiet place to sit and talk to patients.	
					Patients must breach physical barrier of nursing station door before they can engage with the nurse.
					Patients became invisible to nurses and opportunities for engagement were missed.
MOTIVATION	Reflective	Beliefs about capabilities	*Nurses' and patients' personal resources*	Nurse does not believe engagement is helpful.	Patient does not believe engagement is helpful.
				Impoverished view of personal efficacy, lack of confidence.	Patient thinks nurse does not know how to help them so disengages.
				Nurses feel uncertain about the outcomes of engagement.	
					Patients may be apprehensive to engage as they know conversations may be difficult.
					Different patients bonded with different nurses depending on characteristics such as age, gender, and ethnicity.
				Nurses must not write a patient off due to their illness.	
		Beliefs about consequences	*Organisational climate and culture*	Many competing demands, so nurses put the needs of the system before that of the patient and do not follow through with engagement.	
			Safety and infrastructure	Nursing work focuses on risk management over engagement, as nurses are fearful of physical attack.	
		Social and professional identity	*Organisational climate and culture*	Nurses did not show a united approach to patient care.	
				Nurses focused on control and risk as this is the dominant ward philosophy	
			Nurses' personal resources	Nurses believe that engagement is part of their role, however find it difficult due to competing demands.	
			Safety and infrastructure	Nursing work focuses on risk management over engagement.	
		Optimism	*Organisational climate and culture*		Patients find it difficult to speak to a nurse who does not have time to engage with them.
			Nurses' and patients' personal resources	Nurse has tried to engage unsuccessfully in the past.	Patient has tried to engage unsuccessfully in the past.
				Nurses feel uncertain about the outcomes of engagement.	
				Paucity of empirically proven engagement techniques.	

COM-B	TDF Domains	Category	Nurse-related factors	Patient-related factors
			Nurses must not write a patient off due to their illness.	
	Intentions	*Organisational climate and culture*	Nurses need to embrace change.	
	Goals	*Nurses' personal resources*	Paucity of empirically proven engagement techniques means nurses do not have a basis for engagement.	
Automatic	Reinforcement	*Organisational climate and culture*	Engagement is not seen as a priority by the organisation, therefore nurses put the needs to the system before that of the patient.	
		Nurses' and patients' personal resources	Engaging regularly encouraged future engagement.	
			Engaging regularly built relationships with patients	Systematic, continuous contact created a bond.
	Emotion	*Organisational climate and culture*	Nurses focused on control and risk	
			Organisational stressors make nurses disengage.	
			Knowing oneself and one's emotional triggers and limits protects the nurse from psychological harm and burnout.	
			Nurses who felt connected to their patients were more likely to engage.	Patients were more likely to engage when they felt a connection with their nurse.
		Nurses' personal resources	Uncomfortable with being with patients other than in a task orientated role.	
			Nurse disengages from patients to protect themselves from psychological harm and distress.	
		Patients' personal resources		Patients may be apprehensive to engage as they know conversations may be difficult.
		Safety and infrastructure	Nurses did not want to engage as they were fearful of physical violence.	Patients stayed in their rooms due to fear of physical attack.

APPENDIX B

B1 – Supplementary material from Chapter 5, paper 2

B1.1 – Observation template

<table>
<tr><td colspan="8">Observation categories</td></tr>
<tr><td>1. Interactive behaviour</td><td colspan="2">1. Positive: praise, compliment, positive feedback, laughter</td><td colspan="3">2. Negative: reprimand, derogatory remark, discouragement, negative feedback</td><td colspan="2">3. Neutral: neither positive or negative</td></tr>
<tr><td>2. Individual non-verbal</td><td colspan="2">1. Positive: smile, friendly gesture, positive physical contact</td><td colspan="3">2. Negative: frowns, grimaces, negative gestures, negative physical contact, restrain</td><td colspan="2">3. Neutral: neither positive or negative</td></tr>
<tr><td>3. Group verbal</td><td colspan="2">1. Positive: praise, compliment, positive feedback, laughter</td><td colspan="3">2. Negative: reprimand, derogatory remark, discouragement, negative feedback</td><td colspan="2">3. Neutral: neither positive or negative</td></tr>
<tr><td>4. Group non-verbal</td><td colspan="2">1. Positive: smile, friendly gesture, positive physical contact</td><td colspan="3">2. Negative: frowns, grimaces, negative gestures, negative physical contact, restrain</td><td colspan="2">3. Neutral: neither positive or negative</td></tr>
<tr><td>5. Ignoring patient</td><td colspan="2">1. Inappropriate</td><td colspan="3">2. Appropriate</td><td colspan="2">3. Appropriateness cannot be judged</td></tr>
<tr><td>6. Solitary task orientated</td><td colspan="7">Reading, writing, phone, cleaning, walking etc.</td></tr>
<tr><td>7. Other</td><td colspan="7">Interacting with staff, absent from ward or other behaviour that does not fall into the above categories</td></tr>
<tr><td colspan="8"></td></tr>
<tr><td colspan="8">Date of observation:
Observation #:</td></tr>
<tr><td colspan="2">Nurse:</td><td>Time of observation:</td><td>0-14</td><td>15-29</td><td>30-44</td><td>45-59</td><td>Comments:</td></tr>
<tr><td colspan="2"></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="2">Patients:</td><td>Time of observation:</td><td>0-14</td><td>15-29</td><td>30-44</td><td>45-59</td><td></td></tr>
<tr><td colspan="2"></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

B1.2 – service user and carer semi-structured interview topic guide

Thank you for agreeing to do this interview, I very much appreciate your time in doing this. As we have discussed, our conversation will focus around the interactions you have experienced with nurses whilst an inpatient. It will probably last up to an hour. If you need a break or want to stop at any point, please just let me know and I'll be happy to accommodate your needs.

Obviously, there is also a camera filming your interview too, sometimes I'll need to look at it briefly to check everything is still working. Please don't let this stop you from talking, I am still listening. It just means that what you're saying is really important and I don't want to miss it!

Let's start with some introductory questions to let you ease into it…

Introductions

- Age
- Number of admissions
- Length of admission
- Legal status while admitted
- Diagnosis

THEME 1: Personal experiences

Could you tell me about any experiences good or bad that really stand out to you in regards to your interactions with nurses while an inpatient?

- Good experiences
- Bad experiences
- What made the experiences either good or bad for you?
- How can these experiences be applied to improving interactions?
- Anything you've seen nurses personally do?
- Anything you think the ward team does?
- Anything you think the organisation does?

What is it about nurse-patient interactions that make them helpful or not?

- What do you need from nurses?

- What do nurses do that’s helpful?
- Is there anything that nurses do that is unhelpful?

What would good nurse-patient interactions look like on the ward?

- How would you know if you were receiving helpful interaction?
- How would you feel?
- What would be said/done?
- Who would be involved?
- How long?

How could nurse-patient interactions on the ward be improved?

- What are the main problems?
- What needs to change for the desired improvements to take place?
- Anything service users need to facilitate interactions?
- Anything nurses personally could do?
- Anything the ward team could do?
- Anything the organisation could do?

To sum up...

As you know, this project is about something called ‘therapeutic engagement’, I wonder what this means to you, what do you understand by those words?

- Conceptualising therapeutic engagement from service user’s point of view

THEME 2: Behaviour change (underlying drivers for current behaviour)

YOUR CAPABILITY AND OPPORTUNITIES TO ENGAGE

Think of a time when you were able to easily interact with a nurse. What enabled you to do that?

- Physical capabilities e.g. things that have been put in place to help you interact

- Psychological capabilities e.g. how does your mental state need to be to interact / do you interact in different ways depending on how you feel psychologically
- To what extent do physical resource factors facilitate or hinder interactions? E.g. time, prompts, paperwork, layout of ward etc.

Based on what you've just told me, how could nurse-patient interactions be improved?

- How could these things be developed into something that could improve therapeutic nurse-patient interactions?

YOUR MOTIVATIONS TO ENGAGE

Could you tell me about any factors that really motivate / demotivate you to interact with nurses?

- When do you feel the most motivated?
- What makes you feel demotivated?
- Give me an example of a time that you've felt motivated/demotivated

Based on what you've just told me, how could nurse-patient interactions be improved?

- How could these motivating factors be applied to improve therapeutic nurse-patient interactions?

Anything else you would like to add?

THANK YOU FOR YOUR TIME…

I will be in touch with you soon so you can review your film and choose which sections you would like to have included in the 30-minute trigger film that will be shown to staff and other service users at the co-design event.

B1.3 – Clinician semi-structured interview topic guides

I'd like to base this conversation around your experiences of nurse-patient interaction, and link it to some of the things that were discussed at the away day and the observations that I have been doing on the ward…

Warm up questions

- Years qualified if a nurse/medic/OT etc.
- How long been working on the ward
- What band nurse are you?
- What's it like working on the ward
- What's changed since you started there?

AWAY DAY QUESTIONS

At the away day one topic that kept coming up as something the ward would like to improve was communication with patients. What are your thoughts on this?

- How do you think communication needs improving?
- What are the main challenges?
- What needs to change if we're going to improve communication between staff and patients?
- Personal/ward level/organisational level
- Can you give me examples of where communication has worked well
- Can you give me examples of where communication hasn't worked well

QUESTIONS FROM OBSERVATIONS

Thinking back to your last shift, what sort of interactions did you have with patients? (WHAT DO PATIENTS WANT FROM TE)

- Do you think some of them were more like TE than others?
- Example of times when you think your interactions have been therapeutic
- Example of times when you think your interactions haven't been therapeutic

- Content of conversation
- Who approaches who and why?
- What do you think patients want from therapeutic engagement

Patients often say they would like meaningful conversations and interactions with MH nurses. Are there particular challenges to providing that sometimes?

- Timeframe – within the existing time constraints, are there ways that MH nurses can have more meaningful interactions, even in a short time?

During my observations I've noticed that patients come to you with an array of different problems and issues. What things do you feel most comfortable dealing with? (NURSES' SKILLS)

- Anything you really enjoy dealing with?
- What makes it enjoyable?
- What makes you feel comfortable?

In contrast, are there any particular problems or issues that patients bring to you that you struggle with?

- Can you tell me more about that?
- What would help you deal with things like that?
    - Personal/ward level/organisational level

I've noticed though my observations, and I know as a nurse myself, there are lots of rules and procedures that you're expected to follow. I was interested in whether you think any of these impact or impair the quality of relationships you have with patients?

- What sort of things?
- Can you give me some examples?
- How does that affect you or the relationship?
- Are there ways of minimising the effects of those procedures?

During my observations I have witnessed some behaviour from patients that is clearly scary for staff to have to deal with and I know that people have been assaulted on this ward. How does this impact on the interactions you have with patients?

- What is the impact
- What support is needed to lessen the impact
- How do you personally deal with violent/aggressive behaviour
- Any coping mechanisms

During my observations I saw many instances of interactions with patients using really skilful techniques. I was wondering whether you had any preferred way or techniques of interacting with patients?

- What gets the best response from patients?
- What do you find easiest
    - Through an activity
    - Through medication
    - Directly approaching
    - Waiting for patient to approach you etc.

Are there particular situations that challenge such an approach?

- Ask for specific examples
- What do you do when that happens?

What does the term therapeutic engagement mean to you?

- Do you see day-to-day interactions between nurses and patients as potentially part of therapy?
- If not, could they be? And how?

THEME 1: Personal experience

Could you tell me about any recent experiences that really stand out to you in regards to engaging with a patient?

- Good experiences
- Bad experiences
- What made the experiences either good or bad?
- What lessons/learning do you think could be taken from these examples that might improve engagement more generally?

What would therapeutic engagement look like on the ward?

- How would you know if you were giving therapeutic engagement?
- How would you feel?
- What would be said/done?
- Who would be involved?
- How long?

What areas of nurse-patient interaction do you think you do well/not well?

- What is it that enables this to be done well/not well?
- Personal/ward level/organisational level

THEME 2: Behaviour change (underlying drivers for current behaviour)

CAPABILITY AND OPPORTUNITY

Think of a time when you were able to easily engage with a patient. What enabled you to do that?

- Physical capabilities/things put in place to help e.g. systems you could use for monitoring
- Psychological capabilities (how do you mentally need to feel to engage therapeutically with patients)?
- Tell me about role models, support or social structures that either enhance or hinder engagement (opportunity)
- To what extent do physical resource factors facilitate or hinder engagement? E.g. time, prompts, paperwork, layout of ward etc. (opportunity)
- How could these things be developed into something that could improve engagement?

MOTIVATION

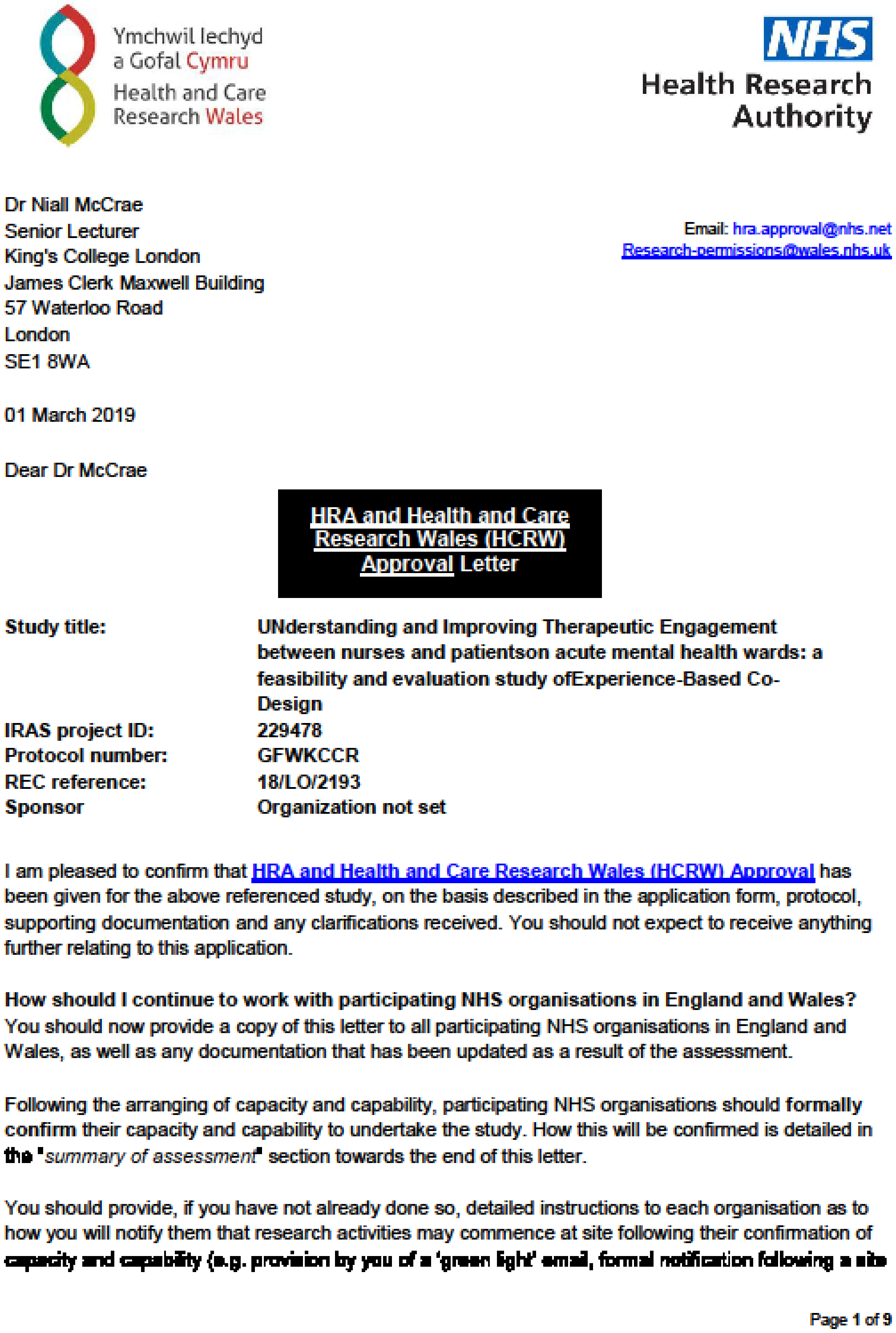
Could you tell me about any factors that really motivate you to engage with a patient?

Could you tell me about anything that really demotivates you and makes you want to disengage?

- When do you feel the most motivated?
- What makes you feel demotivated?
- Give me a recent example of a time that you've felt motivated/demotivated
- How could these motivating factors help us to think about how to improve therapeutic engagement on the ward?

Anything you think I'm missing when we talk about nurse-patient therapeutic engagement?

B2.1 – HRA approval



Ymchwil Iechyd a Gofal Cymru
Health and Care Research Wales

NHS
Health Research Authority

Dr Niall McCrae
Senior Lecturer
King's College London
James Clerk Maxwell Building
57 Waterloo Road
London
SE1 8WA

Email: hra.approval@nhs.net
Research-permissions@wales.nhs.uk

01 March 2019

Dear Dr McCrae

HRA and Health and Care Research Wales (HCRW) Approval Letter

Study title:	**UNderstanding and Improving Therapeutic Engagement between nurses and patientson acute mental health wards: a feasibility and evaluation study ofExperience-Based Co-Design**
IRAS project ID:	**229478**
Protocol number:	**GFWKCCR**
REC reference:	**18/LO/2193**
Sponsor	**Organization not set**

I am pleased to confirm that HRA and Health and Care Research Wales (HCRW) Approval has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications received. You should not expect to receive anything further relating to this application.

How should I continue to work with participating NHS organisations in England and Wales?
You should now provide a copy of this letter to all participating NHS organisations in England and Wales, as well as any documentation that has been updated as a result of the assessment.

Following the arranging of capacity and capability, participating NHS organisations should formally confirm their capacity and capability to undertake the study. How this will be confirmed is detailed in the "*summary of assessment*" section towards the end of this letter.

You should provide, if you have not already done so, detailed instructions to each organisation as to how you will notify them that research activities may commence at site following their confirmation of capacity and capability (e.g. provision by you of a 'green light' email, formal notification following a site

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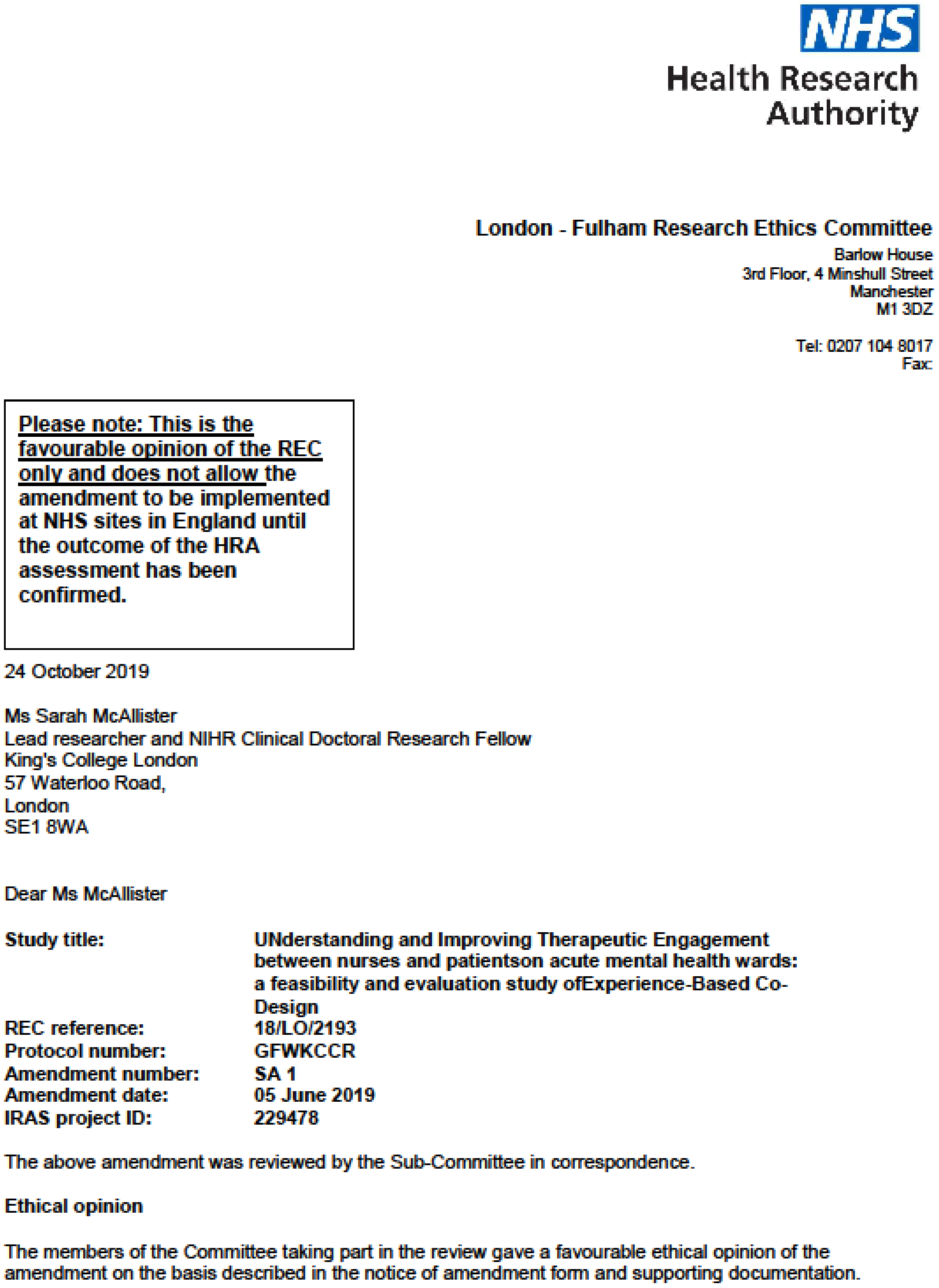
B2.2 – HRA amendment



NHS
Health Research
Authority

London - Fulham Research Ethics Committee
Barlow House
3rd Floor, 4 Minshull Street
Manchester
M1 3DZ

Tel: 0207 104 8017
Fax:

Please note: This is the favourable opinion of the REC only and does not allow the amendment to be implemented at NHS sites in England until the outcome of the HRA assessment has been confirmed.

24 October 2019

Ms Sarah McAllister
Lead researcher and NIHR Clinical Doctoral Research Fellow
King's College London
57 Waterloo Road,
London
SE1 8WA

Dear Ms McAllister

Study title:	**UNderstanding and Improving Therapeutic Engagement between nurses and patientson acute mental health wards: a feasibility and evaluation study ofExperience-Based Co-Design**
REC reference:	**18/LO/2193**
Protocol number:	**GFWKCCR**
Amendment number:	**SA 1**
Amendment date:	**05 June 2019**
IRAS project ID:	**229478**

The above amendment was reviewed by the Sub-Committee in correspondence.

Ethical opinion

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

B3.1 – Service user and carer participant information sheet and consent form

Understanding and improving nurse-patient therapeutic engagement on acute mental health wards

Hello! My name is Sarah McAllister. I'm a mental health nurse and clinical doctoral research fellow at King's College London. I would like to invite you to take part in an NIHR funded postgraduate research study that aims to improve nurse-patient interactions on acute mental health wards.

Before you decide if you want to take part, I would like you to understand why the research is being done and what it would involve for you. I will go through this information sheet with you and answer any questions you have.

Please ask anything that is not clear.

What is the purpose of this study?

We know through past research that positive interactions between nurses and patients admitted to acute wards improve patient outcomes and increase nurses' job satisfaction. Therefore, this study aims to provide a unique opportunity for service users, family members/carers and staff to work alongside each other to improve interactions between nurses and patients on acute mental health wards. Your input is very important, as to date, service users and their carers have not had the chance to work alongside staff to improve nurse-patient interactions in this way.

Why have I been invited?

We are inviting people who have had at least one inpatient stay. As you are the direct recipients of care given within this Trust, your ideas are particularly important to this study.

Do I have to take part?

No. Taking part is completely up to you. Choosing not to take part will not disadvantage you in any way.

What will happen to me if I do take part?

There are five stages in this study, conducted over the course of one year (see below). You have the option to take part in any individual phase, or in all the phases. You can choose to leave the study at any time. If you would like a friend or carer to accompany you to any of the phases, that will be fine. The person accompanying you may also take part if they wish.

Phase 1: Interviews and view film
Phase 2: Meet other service users
Phase 3: Meet Staff
Phase 4: Work with staff in groups
Phase 5: Celebrate successes

Phase 1: An interview about your experiences (run by Sarah McAllister)

First, Sarah will interview you and ask you about your experiences of nurse-patient interaction during your inpatient stay/s. With your permission this interview will be audio recorded and filmed. We ask permission to film the interviews as this is a powerful method of identifying issues and sharing your experiences with staff in phase 3 of the study. The interview will last up to one hour, at a mutually convenient place and time.

Second, we will identify “touch points” (crucial moments, good and bad, that shape your overall experience) in your filmed interview. A professional film company (Redweather Production) will edit your filmed interview and extract snippets relating to your touch points, and put these on a DVD. Sarah will meet with you at a mutually convenient place and time so you can view this DVD and decide whether to agree to parts of the film being shared with other service-users, carers and staff in phase 3. At this point you have three choices:

1) Allow us to use the snippets from your filmed interview to be include in the film
2) Allow us to use narrated quotes from your interview to be included in the film
3) Allow us to use your anonymised interview transcript to inform the next phases of the study

You will be given a release and consent form to sign, specifically relating to the use of your filmed interview.

If you agree to us using your filmed interview or narrated quotes, you can then help identify three key snippets you would like to be included in the film. If you prefer, we can also choose the snippets for you.

Your snippets will be used alongside other service users’ snippets in a short 30-minute film that captures the key moments of each person’s filmed interview. This final film will be reviewed by you in phase 2 of the study, and the final edit will be shown to staff, service-users and carers in phase 3 of the study. Once this film has been made, your full audio recorded and filmed interview will be deleted. The 30-minute film will be kept securely on King’s College London premises, and used only for the purpose of this research, and teaching within King’s College London or Central and North West London NHS Foundation Trust.

If you agree to us using your anonymized transcript data, we will send your anonymized interview transcript to an external transcription agency (outside of the university), who will type up the full text of your interview word by word. We use a reputable company who have signed an agreement. If you do not agree with us using a transcription company, you may still take part and Sarah will transcribe the interview herself. After transcription, Sarah will analyze your transcript in detail to identify ways that nurse-patient interactions can be improved. This anonymous information will be discussed during the following phases of the study. Once your interview has been transcribed, your full audio recorded and filmed interview will be deleted.

Phase 2: Meet other service users (facilitated by a service user expert by experience)

This will involve you being invited to attend a 2-hour meeting with the other service users and their carers who were interviewed to watch the final 30-minute film and discuss your main priorities for how to improve nurse-patient interactions. These ideas will be taken forward to phase 3. The meeting will be held in a conference room at St. Charles hospital (map and further details will be provided closer to the time).

Phase 3: Meet staff (facilitated by a service user expert by experience)

A workshop, known as a co-design event, will be held. You will be invited to attend, along with other service users, carers and staff that link with [insert ward]. The workshop will be held in a conference room at St. Charles hospital (map and further details will be provided closer to the time). The purpose of this workshop is for service users, carers and staff to begin working together to co-design solutions to improve nurse-patient interaction on Thames ward.

The 30-minute film made in phase 1, along with information collected from staff focus groups will be used to help this process. Notes will be made documenting the event, and photographs will be taken to be used in dissemination activities such as presentations, as well as the final thesis for this study. If you do not wish to be in photographs, you will be given a red sticker to put on your name badge. If you are willing to be in photographs you will be given a green sticker.

Phase 4: Work with staff in groups

You will be invited, along with other service users, carers and staff to meet in smaller groups approximately 3 or 4 times over a period of 4 months and for up to 1-2 hours each time. These groups will work together on a specific solution that they think would improve nurse-patient interactions. The staff will then implement the solutions into ward practice. Further details on when and where these meetings will be held will be provided closer to the time.

Phase 5: Celebrate successes (facilitated by a service user expert by experience and staff from Thames Ward)

Finally you will be invited to rejoin with all service users, carers and staff who have been involved in the above phases to describe the solutions you have collectively made and discuss the work you have completed together. This will be a chance to showcase your successes to other people within the Trust.

Phases 2-5 will be observed by Sarah McAllister. Sarah may also invite you to take part in an additional interview where you will be asked about what is it like to take part in the project.

Consent procedure

If you agree to take part you will be asked to sign a consent form relating to phase 1. You will then be asked whether you would like to be contacted about participation in the following phases of this study (which are outlined above but will be explained to you in more detail at that time). If you agree to participate in future phases of the study, you will be asked to sign a consent form relating to those phases at that time. Your participation will not be affected should you choose not to be re-contacted.

What are the possible benefits of taking part?

The findings of this study are expected to improve services for patients, carers and staff. While this may not benefit you personally, your input may help influence and shape mental health services in the future.

What are the possible disadvantages of taking part?

Participation in the study will require you to think about your experiences of nurse-patient interactions when you've been an inpatient. While we do not anticipate this to be upsetting, it may raise concerns for you. If you feel you need to stop participating at any time, you will be free to do this. If you need additional support this can be sought from your GP or care coordinator.

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak to the lead researcher who will answer your questions (Sarah McAllister, Sarah.McAllister@kcl.ac.uk or 07963436817).

In the event that something does go wrong and you are harmed during the research then you may have grounds for legal action for compensation against King's College London but you may have to pay your legal costs. King's College London maintains adequate insurance to cover any liabilities arising from the study.

If you would like to raise a concern, complaint or compliment about your care at CNWL, you can contact the CNWL Patient Feedback and Complaints Service on feedback.cnwl@nhs.net or 0300 013 4799.

What information will be held about me?

Your data will be processed in accordance with the General Data Protection Regulation (GDPR). The data collected for the study will be analysed to learn more about service-users' experiences of nurse-patient interaction.

To ensure your confidentiality is maintained only the research team will have access to identifiable information that you provide. The audio recorded interviews will be coded using numbers and will not show your name before they are sent to an external service for transcription. The audio tapes of the interview will be destroyed once they have been transcribed and analysed. They will be kept in a locked file in a locked room at King's College London.

A short 30-minute film will be made from the filmed interviews. This will include snippets from yours and other service-users' interviews. No information on your diagnosis, name or location will be on the film. The 30-minute film will be kept securely on King's College London premises, and used only for the purpose of this research, and educational purposes within King's College London or Central and North West London NHS Foundation Trust.

To protect your confidentiality, your name, diagnosis and personal details will not be shared in the thesis of this project and any subsequent publications, and you will not be identifiable from any quotes used from your interview.

The lead researcher, Sarah McAllister, will be responsible for security and access to the data. At the end of the study, any information you provided will be secured for seven years in keeping with standard research practice, before being destroyed as confidential waste.

Payments

As a token of appreciation for your time, you will be offered a £20 Love to Shop voucher each time you take part in this study. Travel expenses to and from the events will also be paid up to the cost of a Zone 6 travel card. Lunch and other refreshments will be provided at all the events.

What will happen if I don't want to carry on with the study?

You can choose to leave the study at any time without giving a reason and this will not disadvantage you in any way. If you wish, you can withdraw your data up until the 30-minute film has been made.

What will happen to the results of the research?

The results will be shared with healthcare staff as part of service improvement work at CNWL NHS Foundation Trust. The study will be written up in the PhD thesis of this study, published in professional journals and presented at healthcare conferences. The results may be shared online as part of on-going service improvement work. You will not be identified in any report.

Who is organising and funding this research?

The research is being carried out by Sarah McAllister, as part of a National Institute for Health Research funded doctoral study at the Florence Nightingale Faculty of Nursing, Midwifery & Palliative Care, King's College London. The research is being supervised by Professor Glenn Robert, Professor Alan Simpson, and Dr. Vicki Tsianakas.

Has the research been reviewed by an appropriate research ethics committee?

To protect your interests, all research in the NHS is looked at by an independent group of people called the Research Ethics Committee. This study has been reviewed and given favourable opinion by the London Fulham Research Ethics Committee reference 18/LO/2193.

Data protection statement

King's College London is the sponsor for this study based in the United Kingdom. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. King's College London will keep identifiable information about you until you either tell us you no longer wish to take part in the study, or once the study has finished in March 2021. Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

You can find out more about how we use your information at www.kcl.ac.uk/innovation/research/support/ethics/how-does-gdpr-affect-ethics/king's-college-london-statement-on-use-of-personal-data-in-research.aspx

Central and North West London will use your name and contact details to contact you about the research study and make sure relevant information about the study is recorded for your care, and to oversee the quality of the study. Individuals from King's College London and regulatory organisations may look at your medical and research records to check the accuracy of the research study. Central and North West London will pass these details to King's College London along with the information collected from you. The only people in King's College London who will have access to information that identifies you will be people that need to contact you to invite you to take part in the EBCD process. King's College London will keep identifiable information about you from this study until the study completion date – 31/03/2021.

What happens if you would like more information about the study?

If you would like to ask any questions or receive more information about the study, please contact us on:

Email: Sarah.McAllister@kcl.ac.uk

Address: King’s College London,

Florence Nightingale Faculty of Nursing

& Midwifery and Palliative Care,

57 Waterloo Road,

London,

SE1 8WA

Phone: 07963436817

Thank you for reading.

Please feel free to keep a copy of this information sheet.

You will also be given a copy of the consent form should you decide to sign it.

KING'S College LONDON

Central and North West London NHS
NHS Foundation Trust

IRAS Project ID: 229478 **Participant Identification Number:**

Name of Researcher: Sarah McAllister

CONSENT FORM – Filmed interview (Phase 1)

Understanding and improving nurse-patient therapeutic engagement on acute mental health wards

1. I confirm that I have read the information sheet dated................... (version............) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected. Further, I understand I can withdraw my data up until the film has been made (insert date). ☐

3. I agree to participate in an interview that lasts up to one hour. ☐

4. I agree to my interview being audio recorded. ☐

5. I agree to my interview being video recorded. ☐

6. I agree to review the film of my interview. ☐

7. I am aware that if I agree to parts of my filmed interview being used I will be expected to sign a release form. The release form gives permission for my interview to be used in different formats such as video, paper and/or electronic to share with others as part of this research and for educational purposes within Central and North West London NHS Foundation Trust and King's College London. This will include other service users, carers, health professionals and students. ☐

8. I am happy to be contacted by the researcher regarding future work on this topic and agree to providing the lead researcher my contact details for this purpose. ☐

_______________ _______________ _______________

Name of Participant Date Signature

_______________ _______________ _______________

Name of Person taking consent Date Signature

B3.2 Clinicians' participant information sheet and consent form

Understanding and improving nurse-patient therapeutic engagement on acute mental health wards (The UNITED study)

Hello! We would like to invite you to take part in an NIHR doctoral study that aims to improve nurse-patient engagement on acute mental health wards.

Before you decide if you want to take part, we would like you to understand why the research is being done and what it would involve for you. We will go through this information sheet with you and answer questions you have.

Please ask anything that is not clear.

What is the purpose of this study?

This project seeks to improve the experiences of both those providing and receiving care at (insert ward). We are using an approach called Experience-Based Co-Design (EBCD) which has been previously used in mental health settings in the UK and Australia. The approach provides a unique opportunity for service-users, family members/carers and staff to work alongside each other to improve nurse-patient engagement on acute mental health wards. We're interested in this is because we know that when there's more nurse-patient engagement, nurses have improved job satisfaction and patients experience better outcomes.

Why have I been invited?

In this project we're focusing on staff who have worked on Thames ward or managerial level staff at St. Charles hospital. As a staff member within the Trust you are ideally placed to tell us how to improve the experiences of nurse-patient engagement for staff and patients.

Do I have to take part?

No. Taking part is completely up to you. Choosing not to take part will not disadvantage you in any way.

What will happen to me if I do take part?

There are five stages in this study which will be conducted over the course of one year (see below). You have the option to take part in any individual phase, or in all the phases. You can choose to leave the study at any time.

Phase 1: Interviews

Phase 2: Interview feedback

Phase 3: Meet patients

Phase 4: Work with patients in groups

Phase 5: Celebrate successes

Phase 1: An interview about your experiences (run by the lead researcher, Sarah McAllister)

First, Sarah will interview you for around 30 minutes. You will talk about your experiences of both being a staff member on this ward and your experiences of engaging therapeutically with patients. We will also ask you about things you would like to change on the ward. With your permission, this discussion will be audio recorded. Anonymised recordings will be transcribed by an external transcription agency and then deleted.

Phase 2: Interview feedback event (facilitated by Sarah McAllister)

This will involve you being invited to attend a 2-hour meeting with the other staff members who were involved in the interviews. You will discuss your main priorities for how to improve nurse-patient engagement and these ideas will be taken forward to phase 3.

Phase 3: Meet patients (facilitated by a service user expert by experience)

A three-hour workshop, known as a co-design event, will be held with staff from Thames ward, patients and family/carers that have also shared their experiences of nurse-patient engagement. The purpose of this workshop is for patients, carers and staff to begin working together to co-design solutions to improve nurse-patient engagement on Thames.

A 30-minute film showing patients' experiences of nurse-patient engagement, along with information collected from your interviews will be used to help this process. Notes will be made documenting the event, and photographs will be taken to be used in dissemination activities such as presentations, as well as the final thesis for this study. If you do not wish to be in photographs, you will be given a red sticker to put on your name badge. If you are willing to be in photographs you will be given a green sticker.

Phase 4: Work with patients in groups

Patients, staff and carers will meet in smaller groups approximately 4 times over a period of 4 months and for up to 1-2 hours each time to work together on a specific solution that they think will improve nurse-patient engagement. Thames ward staff will then implement the solution into ward practice.

Phase 5: Celebrate successes (facilitated by a service user expert by experience and staff from (ward)

Finally, all staff, patients and carers will re-join to describe the solutions they have made and discuss the work they have completed together. This will be a chance to showcase your successes to others outside of Thames ward.

Phases 2-5 will be observed by the lead researcher, Sarah McAllister, who may also invite you to take part in an additional interview where you will be asked about what is it like to take part in the project.

Consent procedure

If you agree to take part you will first be asked to sign a consent form relating to Phase 1. You will then be asked whether you would like to be contacted about participation in the following phases of this study (which is outlined above but will be explained to you in more detail at that time). If you agree to participate in future phases of the study, you will be asked to sign a consent form relating to those phases at that time. Your participation will not be affected should you choose not to be re-contacted.

How much time will be taken out of my work schedule?

You have the option to take part in any individual phase, or in all the phases. You can choose to leave the study at any time. We are aware that this project will take up some of your valuable time, and we are grateful for that. However we hope that you understand the importance of your contribution to improving the experience of nurse-patient engagement for both nurses and patients alike. Your managers have agreed to support your time on this project. Lunch and other refreshments will be provided. We will try to give you as much notice as possible about the date and timings of the events.

What are the possible benefits of taking part?

We expect the findings of this study to improve services for staff and patients on [insert ward]. Your input may help influence and shape services and interventions in the future.

What information will be held about me?

Your data will be processed in accordance with the General Data Protection Regulation (GDPR). The data collected for the study will be analysed to learn more about nurses' experiences of nurse-patient engagement.

The lead researcher, Sarah McAllister, will be responsible for security and access to the data. You will be assigned an identification number. This is how we will identify your data, it will not be connected to you by name or any other recognisable feature before it is sent to an external service for transcription. The audio tapes of the interviews will be destroyed once they have been transcribed and analysed. The transcribed

interview will be anonymised with only the identification number allocated to it. This data will be kept in a secure locker at King's College London and only the lead researcher and her supervisory team will have access to it. It may be important to look at the data in years to come, so it will be kept securely for seven years and then be destroyed as confidential waste.

What will happen if I don't want to carry on with the study?

You can choose to leave the study at any time without giving a reason and this will not disadvantage you in any way. If you wish, you can withdraw your data up until the interviews have been analysed.

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak to the lead researcher who will answer your questions (Sarah McAllister Sarah.McAllister@kcl.ac.uk).

In the event that something does go wrong and you are harmed during the research then you may have grounds for legal action for compensation against King's College London but you may have to pay your legal costs. King's College London maintains adequate insurance to cover any liabilities arising from the study.

What will happen to the results of the research?

The results will be shared with healthcare staff as part of service improvement work at CNWL NHS Foundation Trust. The study will be written up in the PhD thesis of this study, published in professional journals and presented at healthcare conferences. The results may be shared online as part of on-going service improvement work. You will not be identified in any report.

Who is organising and funding this research?

The research is being carried out by Sarah McAllister, as part of a National Institute for Health Research funded doctoral study at the Florence Nightingale Faculty of Nursing, Midwifery & Palliative Care, King's College London. The research is being supervised by Professor Glenn Robert, Professor Alan Simpson and Dr. Vicki Tsianakas.

Has the research been reviewed by an appropriate research ethics committee?

To protect your interests, all research in the NHS is looked at by an independent group of people called the Research Ethics Committee. This study has been reviewed and given favourable opinion by the London Fulham Research Ethics Committee reference 18/LO/2193.

Data protection statement

King's College London is the sponsor for this study based in the United Kingdom. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. King's College London will keep identifiable information about you until you either tell us you no longer wish to take part in the study, or once the study has finished in March 2021. Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally identifiable information possible.

You can find out more about how we use your information at www.kcl.ac.uk/innovation/research/support/ethics/how-does-gdpr-affect-ethics/king's-college-london-statement-on-use-of-personal-data-in-research.aspx

What happens if you would like more information about the study?

If you would like to ask any questions or receive more information about the study, please contact the lead researcher, Sarah McAllister:

Email: Sarah.McAllister@kcl.ac.uk

IRAS Project ID: 229478; **Participant Identification Number:** **Name of Researcher**: Sarah McAllister

CONSENT FORM – Staff Interview (Phase 1)

Understanding and improving nurse-patient therapeutic engagement on acute mental health wards

9. I confirm that I have read the information sheet dated.................. (version...........) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

10. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my legal rights being affected. Further, I understand that I can withdraw my data up to the point of data analysis. ☐

11. I understand that relevant sections of the information collected during the study may be looked at by individuals from the sponsor of this study, King's College London, and I give consent for these individuals to have access to this information. ☐

12. I agree to take part in an interview that lasts up to half an hour. ☐

13. I agree to my interview being audio recorded. ☐

6. I am happy to be contacted by the researcher regarding future work on this topic. ☐

7. I agree to take part in the above study. ☐

Name of Participant		Signature
Name of Person taking consent	Signature	

B5 – Excerpts from reflective diary

SU1 – 05/04/19

I found the interview quite challenging, as I felt like it was difficult to get the participant to answer my questions. I would ask a question, then he would respond with an answer that wasn't really related to what I asked. I didn't want to keep cutting him off, so I let him speak about what he wanted to speak about but kept trying to bring it back to what I wanted to talk about after he'd had his say. I tried to probe with deeper with more direct question, which seemed to work better than the more open questions, but I was hoping I would get deeper answers than I did.

Sometimes people who suffer from schizophrenia/psychosis have quite disordered thinking and find it difficult to process what has been said. I maybe need to think a little bit more about this and what the best ways would be to frame questions to get the data I need. I did spend a good hour and a half trying to ask questions in different ways, and there were certainly some parts of the interview that were very useful, but I feel like I was only able to gather information at quite a superficial level and none of the examples he gave really related to the topic I am investigating.

SU5 & 7 interviews

These interviews went well, but there were a couple of points that I was unsure about and wanted to write about it. For SU5, English was not his first language, so I found it very difficult to delve deeper into what he was actually thinking and feeling because I don't think he has the vocabulary to articulate himself. Overall, I got the feeling that he was very pleased with his care and he didn't have anything too bad to say (although after some probing, I was able to get an example of something that happened to him that he thought wasn't good). I'm just not sure how to get something out of somebody if they don't have the vocabulary to be able to articulate themselves. It makes interviewing very hard.

SU7 was great and she was very talkative, but she started the interview off saying that she didn't want to be too negative, but I could tell from some of our informal chat that she definitely had some negative things to say. She gave me some examples of things that happened to her on the ward, but she always said them with the caveat that she knew the ward was busy and she could see how understaffed they were. I was trying really hard to get more out of her, but she would drop her voice quite low when I could tell she wanted to say something more, and when I probed, she'd often sort of backtrack on what she'd said. At the beginning of the interview, she said that she didn't want to be filmed because she was worried that if she did ever go back into hospital she didn't want to "piss off" of the staff. I guess this is just a general flaw of most interviews, but it was a shame as I wanted to get to the juicy stuff, but just couldn't get her to go that deep. I'll have to ask in supervision to see if anybody has any tricks that you can use to put people at ease.

Staff interview reflections:

Was difficult as I don't think that staff felt like there was a problem with their engagement apart from the fact that they think there's not enough time to do it. Not sure how to frame asking them about when I saw poor interactions. I tried to probe a bit further and ask what they think they can improve in the short amount of time they have, but they didn't really know and were concerned patients didn't think the short interactions were meaningful. I tried to speak a little bit about what I was told by patients in the interviews and that they did find short interactions helpful if they were done right. Not sure if I'm meant to be giving info in an interview, but since I don't have much of a chance to feed anything back to them I felt like I needed to say it then.

I think instead of using the word communication it might be best to talk about therapeutic relationships and if the staff think there's any barriers to forming that, as using the word communication didn't really get the answers I was looking for.

Annoyingly I was supposed to have paid bank staff members to be on shift today so staff could be relieved for their interviews. This seemed to get lost in communication and no staff member was allocated. I still don't understand why as the staff had the topic guides printed out, so they'd obviously been told about it, but for some reason the staff member hasn't been booked. Thankfully the NIC was quite accommodating and made the other nurse go in for an interview as well as going for one herself.

Reflection after supervision – 26/04/2019

Today we went through my interviews at supervision. The mains points to come out of this was that we thought it was important to ask service users and nurses what they each thought they'd get out of therapeutic interactions e.g. ask nurses what they thought the purpose of interactions were, and what patients thought nurses thought the purpose of the interactions were. That way it would delve deeper into the reasoning behind why nurses and patients actually do engage with each other.

I could frame questions such as “what is the purpose of interactions” or “how do you see your role in patient’s therapy” or “how do interaction help patients” for patients I could ask them “what do you think the nurses want when they interact with you?”

We also thought I should be asking patients and staff what they think the biggest issues are. And also ask them what they think the biggest issues are for the other group e.g. ask nurses what they think patients think are the biggest issues with engagement and ask patients what they think nurses’ biggest issues with engagement are.

We also spoke about the language that is used and how to start the interview. We decided that it was best to use the term nurse-patient interactions or contact when describing what we’d be talking about in the interview because we don’t want to lead the participants to start talking about what they think I want them to say.

APPENDIX C

C1 – Supplementary material from Chapter 6, paper 3

C1.1 – GUIDED Checklist

Item description	Explanation	Page(s) in manuscript where item is located	Other*
1.Report the context for which the intervention was developed.	Understanding the context in which an intervention was developed informs readers about the suitability and transferability of the intervention to the context in which they are considering evaluating, adapting or using the intervention. Context here can include place, organisational and wider sociopolitical factors that may influence the development and/or delivery of the intervention (15).	3-4: Background, 7: setting	
2.Report the purpose of the intervention development process.	Clearly describing the purpose of the intervention specifies what it sets out to achieve. The purpose may be informed by research priorities, for example those identified in systematic reviews, evidence gaps set out in practice guidance such as The National Institute for Health and Care Excellence or specific prioritisation exercises such as those undertaken with patients and practitioners through the James Lind Alliance.	3-7: background, 12: define the problem in behavioural terms	Systematic integrative review previously conducted (McAllister et al. 2019)
3. Report the target population for the intervention development process.	The target population is the population that will potentially benefit from the intervention – this may include patients, clinicians, and/or members of the public. If the target population is clearly described then readers will be able to understand the relevance of the intervention to their own research or practice. Health inequalities, gender and ethnicity are features of the target population that may be relevant to intervention development processes.	8: participants 13-14: specify the target behaviours, Table 2	
4. Report how any published intervention development approach contributed to the development process	Many formal intervention development approaches exist and are used to guide the intervention development process (e.g. 6Squid (16) or The Person Based Approach to Intervention Development (17)). Where a formal intervention development approach is used, it is helpful to describe the process that was followed, including any deviations. More general	**4-6 and Figure 1**	

	approaches to intervention development also exist and have been categorised as follows (3):- Target Population-centred intervention development; evidence and theory-based intervention development; partnership intervention development; implementation-based intervention development; efficacy based intervention development; step or phased-based intervention development; and intervention-specific intervention development (3). These approaches do not always have specific guidance that describe their use. Nevertheless, it is helpful to give a rich description of how any published approach was operationalised.		
5. Report how evidence from different sources informed the intervention development process.	Intervention development is often based on published evidence and/or primary data that has been collected to inform the intervention development process. It is useful to describe and reference all forms of evidence and data that have informed the development of the intervention because evidence bases can change rapidly, and to explain the manner in which the evidence and/or data was used. Understanding what evidence was and was not available at the time of intervention development can help readers to assess transferability to their current situation.	4, 9-11	Systematic integrative review previously conducted (McAllister et al. 2019) Previously conducted exploratory study (McAlliser & McCrae 2017)
6. Report how/if published theory informed the intervention development process.	Reporting whether and how theory informed the intervention development process aids the reader's understanding of the theoretical rationale that underpins the intervention. Though not mentioned in the e-Delphi or consensus meeting, it became increasingly apparent through the development of our guidance that this theory item could relate to either existing published theory or programme theory.	**4-6 and Figure 1**	
7. Report any use of components from an existing intervention in the current intervention development process.	Some interventions are developed with components that have been adopted from existing interventions. Clearly identifying components that have been adopted or adapted and acknowledging their original source helps the reader to understand and distinguish between the novel and adopted components of the new intervention.	Table 4 and page 21	
8. Report any guiding principles, people or factors that were prioritised when making decisions during the intervention development process.	Reporting any guiding principles that governed the development of the application helps the reader to understand the authors' reasoning behind the decisions that were made. These could include the examples of particular populations who views are being considered when designing the intervention, the modality that is viewed as being most appropriate, design	4-6 and Figure 1, 8, and 21 – 25	

	features considered important for the target population, or the potential for the intervention to be scaled up.		
9. Report how stakeholders contributed to the intervention development process.	Potential stakeholders can include patient and community representatives, local and national policy makers, health care providers and those paying for or commissioning health care. Each of these groups may influence the intervention development process in different ways. Specifying how differing groups of stakeholders contributed to the intervention development process helps the reader to understand how stakeholders were involved and the degree of influence they had on the overall process. Further detail on how to integrate stakeholder contributions within intervention reporting are available (19).	8, 11-21	
10. Report how the intervention changed in content and format from the start of the intervention development process.	Intervention development is frequently an iterative process. The conclusion of the initial phase of intervention development does not necessarily mean that all uncertainties have been addressed. It is helpful to list remaining uncertainties such as the intervention intensity, mode of delivery, materials, procedures, or type of location that the intervention is most suitable for. This can guide other researchers to potential future areas of research and practitioners about uncertainties relevant to their healthcare context.	**7-16, 12** (Table 4)	
11. Report any changes to interventions required or likely to be required for subgroups.	Specifying any changes that the intervention development team perceive are required for the intervention to be delivered or tailored to specific subgroups enables readers to understand the applicability of the intervention to their target population or context. These changes could include changes to personnel delivering the intervention, to the content of the intervention, or to the mode of delivery of the intervention.	This intervention is not designed for subgroups, it is meant for the target population of nurses and service users on acute mental health wards.	
12. Report important uncertainties at the end of the intervention development process.	Intervention development is frequently an iterative process. The conclusion of the initial phase of intervention development does not necessarily mean that all uncertainties have been addressed. It is helpful to list remaining uncertainties such as the intervention intensity, mode of delivery, materials, procedures, or type of location that the intervention is most suitable for. This can guide other researchers to potential future areas of research and practitioners about uncertainties relevant to their healthcare context.	21-25	
13. Follow TIDieR guidance when describing the developed intervention.	Interventions have been poorly reported for a number of years. In response to this, internationally recognized guidance has been published to support the high-quality reporting of health care interventions5 and public health	11-21, including Table 4	

	interventions14. This guidance should therefore be followed when describing a developed intervention.		
14. Report the intervention development process in an open access format.	Unless reports of intervention development are available people considering using an intervention cannot understand the process that was undertaken and make a judgement about its appropriateness to their context. It also limits cumulative learning about intervention development methodology and observed consequences at later evaluation, translation and implementation stages. Reporting intervention development in an open access (Gold or Green) publishing format increases the accessibility and visibility of intervention development research and makes it more likely to be read and used. Potential platforms for open access publication of intervention development include open access journal publications, freely accessible funder reports or a study webpage that details the intervention development process.	Published in an open access journal.	

C1.2 – Breakdown of touchpoints to improvement priorities and associated target behaviours

Table 1: Touchpoints from co-design team interviews and ward observations and their overarching themes

Service user touchpoints	Overarching theme
Nurses did not take my concerns into consideration	Do not dismiss me
Nurses did not take my physical health seriously	
Nurses blamed my reactions on my mental health	
Please respond to my requests in a timely manner	
Please explain what you are doing	When you tell me something, please give a reason
Be clear about your reasons for doing something	
Introduce yourself to me	
Do not coerce me into doing something	
Listen to me	Please just give me some of your time
I was left on my own	
Lack of engagement results in misunderstandings of my problems	
Treat me like a human being	Validate me as a person
Please approach me / help me to approach you	
Forgive and forget	
Understand me and my situation	
Nurses are on the computer all day	Unhelpful behaviours
I need privacy for one to ones	
Nurses give me robotic, one-size-fits all care	
Staff touchpoints	**Overarching themes**
We want better team relations	Improving ward culture
Needs to be more openness to change within the team	
Improvement in staff-managerial relations	
Improve the culture around response	
Bring the fun back into the job	
Create better bonds with service users	Improving interactions with service users
Streamline working practices to create / free up time for interactions	
Improve the way things are communicated to service users	
Improve the way messages are handed over within the team	

Table 2 – Service user improvement priorities and target behaviours drawn from touchpoints by discussion with co-design team, emotional mapping exercise and dot voting

Overarching improvement priorities	Target behaviours
Nurse-patient communication needs to be improved	Help me to approach you / give me different ways to communicate with you
	Do not dismiss me or make me feel like a burden / take my concerns seriously
	We need calm, rational conversations with nurses
Treat me like a human being	Do not give me robotic care / one size fits all care
	Do not coerce me into doing something
Forgive and forget	Please be motivated to know who I am as a person, not just a diagnosis
	Remember that you do not see me at my best
Help me help myself	Create a safe space for me to interact with you
	Nurse to support me / give me practical advice
	Nurse to explain why I am on the ward early on in admission
	Nurse to be specific about what will happen to me regarding my medication, admission, and discharge
	Nurse to help me to understand myself

Table 3 – staff improvement priorities and target behaviours drawn from touchpoints by discussion with co-design team, emotional mapping exercise and dot voting

Overarching improvement priorities	Target behaviours
Improve the way we communicate with service users	Keep in check my tone of voice
	Ensure I fully explain what I am doing to service users
	Do not promise things I cannot give
	Ensure there is a consistent message being delivered by the team
Improve the way that leave is communicated	Ensure all staff are aware when service users' leave changes
	Explain leave rights to service users
Improve the culture around response	When I hear the alarm, I will respond in a timely manner
	I will step in to help my colleagues if they need it
	I will ensure service users do not have to step in to help defuse a situation that does not involve them
Improve the way messages are handed over within the team	Be clear and concise when handing messages over to the team
	Ensure I handover messages to the nurse in charge

	When a service user tells me something, I will ensure I record it in the notes or tell the nurse in charge

Table 4 – joint improvement priorities and target behaviours

Joint priorities	Service user and staff priorities they came from
Communicating with withdrawn people	Nurse-patient communication needs to be improved (staff) Improve the way things are communicated to service users (service user) Treat me like a human being (service users)
Improving team relations and improving overall communication with service users	Communicating leave (staff) Improve the culture around response (staff) Improve the way messages are handed over within the team (staff)
Nursing staff to help service users help themselves	Help me help myself (service users) Treat me like a human being (service users) Improve the way things are communicated to service users (service users) Nurse-patient communication needs to be improved (staff) Forgive and forget (service users)
Improve nurses' confidence when interacting with service users	Improve the way things are communicated to service users (staff)

C1.3 – Participants' small group exercise worksheet

Write improvement priority here

Things that currently get in the way of this being done in practice (use your COM-B barriers to help stimulate ideas)

Why this should be improved (think about what needs to be done differently in practice to make improvement happen)

Your ideal solution (think about when / where / with whom should this be done with. Use the practical examples provided to help stimulate ideas)

Who needs to be involved to make this improvement happen?

C1.4 – APEASE criteria translated for use with co-design team

Table 1: APEASE criteria and lay translation

APEASE from BCW book by Michie et al.	Lay translation used with co-design team
Affordability	Can the organisation afford what we are proposing? What are the long-term costs of the intervention? o Can these be covered in the future?
Practicability	Who are the key people who would drive the intervention forward? Could this become a normal part of ward care / ward work? Would people know how to use the intervention? o If not, what can we put in place to help them with this? Are there enough resources for nurses to be able to use the intervention? o If not, what could be put in place to help with this? Will nurses be able to modify the way they work with the intervention?
Effectiveness and cost effectiveness	How many service users, carers or clinicians could the intervention help?
Acceptability	Will nurses want to do this? Will service users want to do this? Do I think this intervention will help service users, carers and clinicians? Do you think the effects of the intervention will have a positive impact on nurses' work / patient care?
Side effects / safety	Can we think of any unintended consequences if we implement the intervention? o What can we do to minimise these?
Equity	Will this intervention be fair to everyone? o If not, what can be put in place to make it fairer?

C1.5 – Reflective accounts of the co-design process from members of the co-design team

Box 1 – Reflections from the co-design team

The study of therapeutic engagement in acute hospital wards is something that makes me feel proud and engaged with mental health professionals. During the course of the study staff members and service users attended regular meetings and workshops to discuss the development of the interventions. We all shared our experiences and identified what needed to be improved within hospital wards and came up with ideas about how we could do this. The project led to presentations at service user group at the Trust headquarters and eventually at an acute care forum at the Indian YMCA.

I co-designed the workbook. At the beginning, the first edit was too heavy to grasp. There was too much information for acute patients with their nurse to understand. When we took it to the service user group the feedback we got was not very positive and so we had to refine it. We made the workbook more accessible, easier to read with colourful diagrams.

The filmed interviews of service users reviewed the experiences of nurse-patient interactions in hospital wards. With the data collected we co-designed a thirty-minute film that was recorded and edited along with the workbook. The film was watched by staff and service users at an acute care forum and people were given the opportunity to express their concerns and ask questions. At the acute care forum everyone was given a copy of the workbook and encouraged to consult the co-design team. People reported a better understanding of patient experiences with nurses and were inspired by what we had to say.

For myself as having my mum as a carer, being involved in such a co-design project was very rewarding and felt like giving something back to those people who supported me to recovery and wellbeing. The relationship between patient and nurses needs to be addressed. I had a poor connection and interaction of staff on wards who were not properly trained to do their job. The workbook is a valuable tool that highlights the important information that matters to the patient. As a service user, the project was an opportunity to tell my story of the experiences of being detained, not really acknowledging what was going on around me, especially with staff working along with the experts delivering inpatient care.

Cady Stone (service user co-design team member working on priority 2 & 3)

Box 2 – Reflections from the co-design team

It was early 2018 when I was invited to join a workshop for a study using an experience based co-design (EBCD) methodology to bring staff and service users together to co-design solutions to improve nurse-patient therapeutic engagement on acute mental health wards. The first time I heard about EBCD was in 2015, and I immediately agreed to be part of it.

Through the EBCD journey I've had the privilege to revisit my life story through my personal narrative. It was life changing, it served as a redistribution of ownership and power to my personal life history. Using my own life experiences as a tool to implement new models of care and improve quality standards. Furthermore, it helped my self-esteem and increased my self-awareness. Service users and carers play an increasingly important role in a variety of activities especially in research. What is crucial in their involvement is to build a relationship where professionals and users/carers can support each other on an equal basis and share a common goal. Trust, respect and value are crucial.

What I personally experienced with this research was an amazing collaboration between the researcher, patients and healthcare professionals. Everyone felt always at ease to speak and give their views and experiences on a level of mutual collaboration. No barriers to patients' ideas but collective decision-making. Each person generously shared their incredibly moving testimony of struggle, survival and strength with great dignity and drive to use their adverse experience to make a real difference.

The co-designed activities and events did not only serve the research as a whole but they inspired the creation of a workbook to encourage a model of therapeutic engagement, signs to help nurses and patients identify when they need to talk further interventions that can ease and improve an inpatient's journey. An incredible toolkit that will have a ripple effect making a difference and help create a cultural change within the Trust.

Vittoria De Meo (carer co-design team member working on priority 2, 3 & 4)

Box 3 – Reflections from the co-design team

For anyone who is hospitalised due to their mental health, processing when, where or what is happening can be a very challenging experience. Feelings of hopelessness, confusion, isolation and worry all cloud your thinking, whilst the mantle of looking after yourself is taken away and placed in the arms of complete strangers. For me, as a service user, taking part in a study which aims to improve the interaction between those who care (nurses) and those receiving care (service users) was an easy one. Having the opportunity to make real change was and still is exciting.

Going into the study, I was not sure what to expect. This was the first time that I had done anything like this, so it was new ground for me. A simple recollection can cause difficult emotions to surface again and, in some cases, result in serious distress. However, my anxieties were soon quashed, and I was offered a safe and secure space to share my experiences. Throughout the conversations I never felt pressured or judged, I actually felt empowered. Empowered that my experiences were being taken seriously and will contribute to a wider narrative.

Over the following months I was invited to attend collaborative meetings with the other services users and staff involved with the project. Listening to everyone's accounts and testimonies was quite powerful. Reflecting on the good, the bad and what could be achieved. All of this was neatly woven into a film which was both informative and emotive.

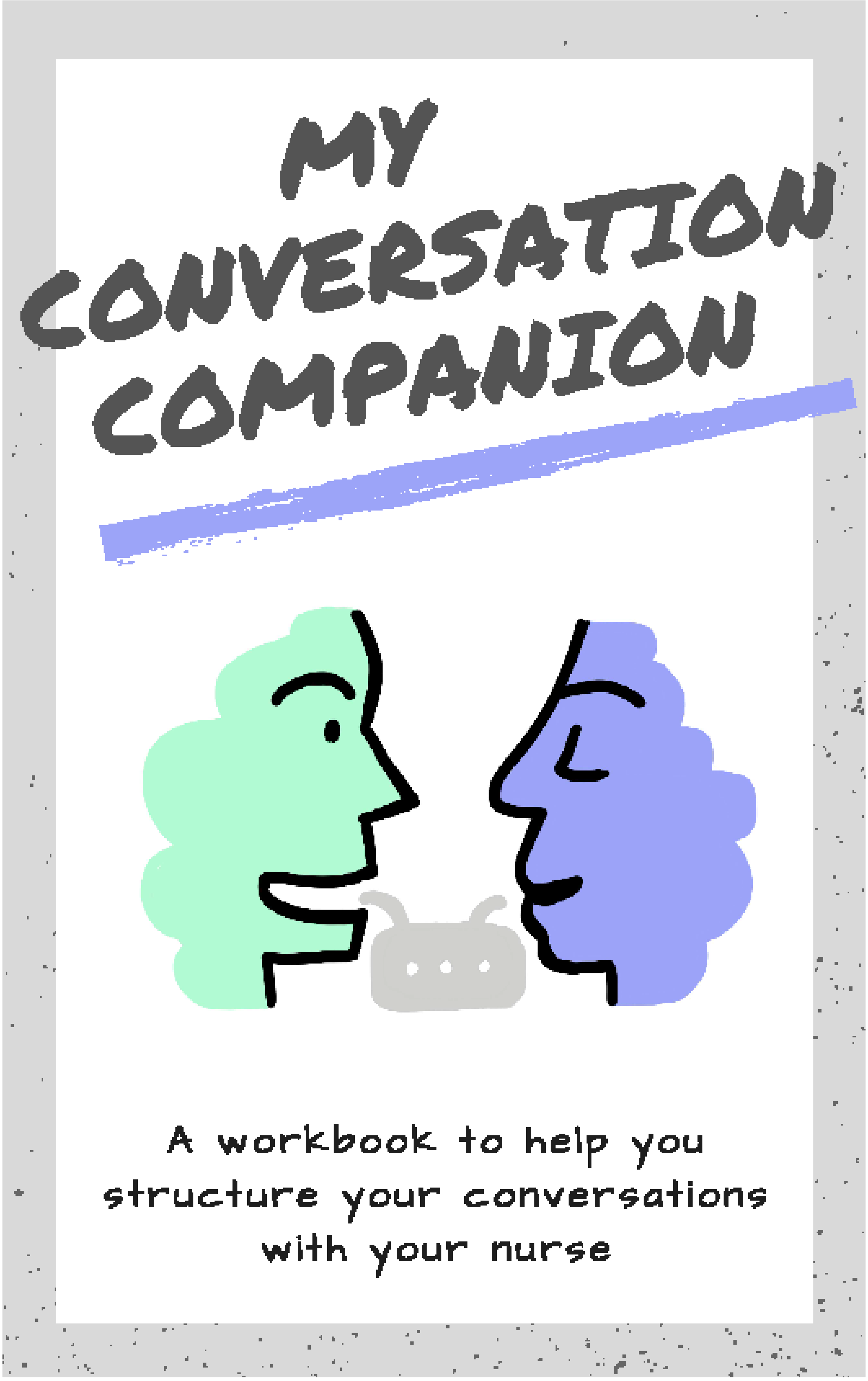
Finally, after agreeing on our recommendations I began working on nurse-patient communication. We made our work even more specific, targeting people who isolate themselves in their rooms. What was insightful was working and hearing from other professionals, utilising their experiences to develop an idea that was both practical and simple. Our main idea was a slider that would be mounted on a service user's door and would allow them to choose between a smiley or a sad face (depending on their mood). Thus, indicating to nursing staff if the service users would like to engage or not.

I really enjoyed contributing my thoughts to this idea as the idea of engaging with service users who withdraw really resonates with me. In my ‘day job’ I am a Peer Support Worker at an acute hospital, and this is quite common. I discussed with my colleagues what they thought of the idea, I am pleased to say it was warmly received. I also identified a service user on the ward who matched the type of individual we were trying to help. Taking part in the study therefore directly affected how I approached service users and subsequently, I have managed to engage in some really good work with the individual.

Throughout the process of this study, I have always felt empowered to share my views and experiences. Whether this was in our group work or whilst recording my testimony. I have also learnt the power of networking to build and develop ideas alongside the ability to reflect. Reflection in my opinion has been a key thread which I have experienced throughout taking part in this study. Not just the reflection on what I had experienced as an inpatient, but also it allowed me the time and space to reflect on what really mattered to those going through similar experiences now.

Nick Canham (Peer Support Worker & service user co-design team member working on priority 1)

C1.6 – the *Let's Talk* Toolkit Conversation Companion workbook



MY
CONVERSATION
COMPANION

A workbook to help you
structure your conversations
with your nurse

CONTENTS

PART 1

PART 2

PART 3

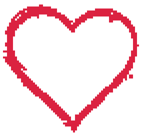
PART 4

ABOUT THIS BOOKLET

This workbook came about because a very dedicated group of service users, nurses and clinicians wanted to improve the interactions that nurses and service users have on acute mental health wards.

The following pages have been fully co-designed by a group of service users from Central and North West London NHS Foundation Trust, nurses and clinicians from Thames ward and a researcher and mental health nurse from King's College London.

To everybody who has had input into the making of this book, we are thankful.



How to use this workbook

Use this workbook with your nurse to:

1) Help you understand your experiences

2) Organise your ward rounds

3) Plan your discharge

Work through the book at your own pace.

There's no need to do all the exercises at once.

Do as many or as few of the exercises as you like.

You can ask your nurse to help or do some of the exercises on your own.

PART 1

WHERE ARE YOU NOW?

Complete these exercises early on in your admission

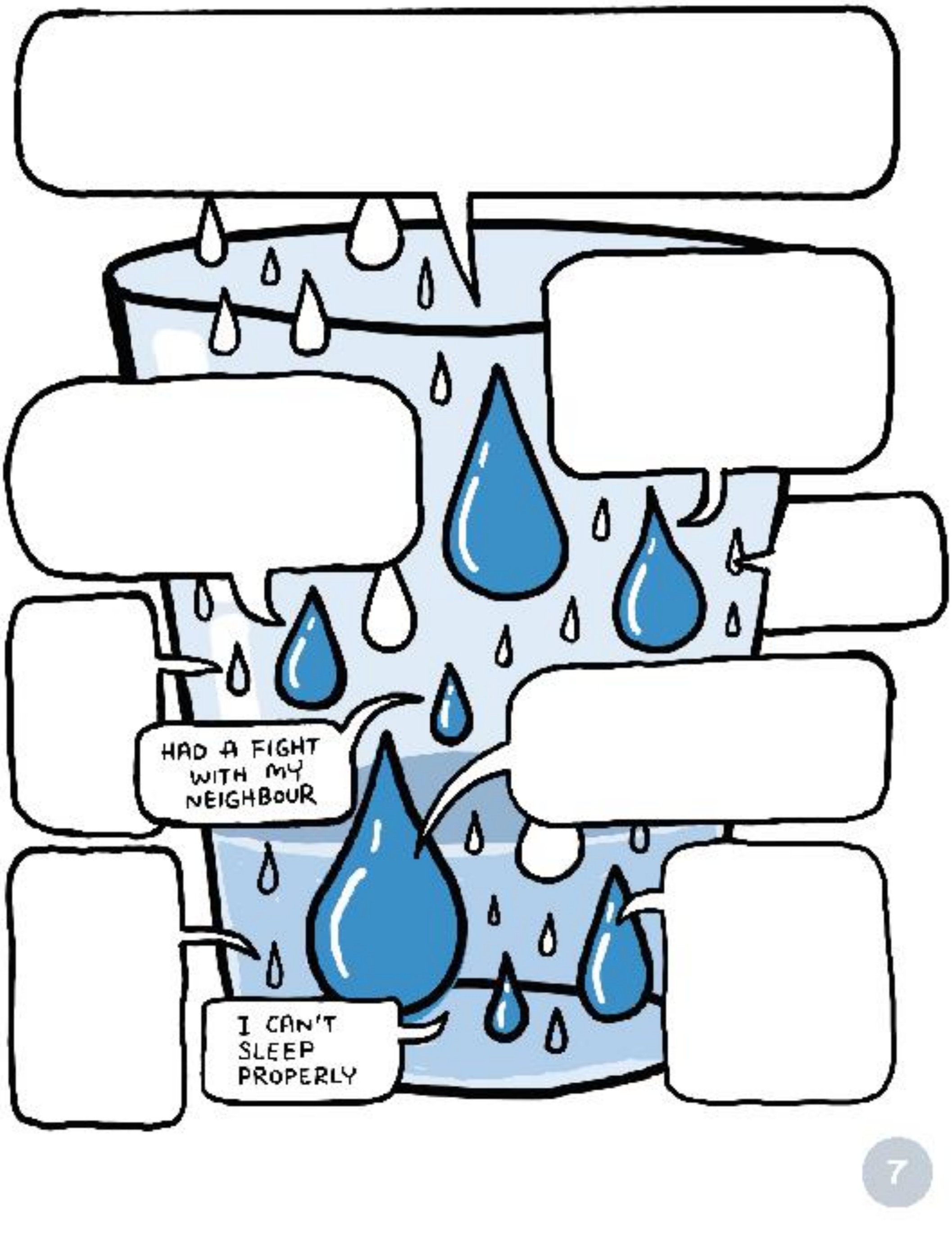
MY STRESS CUP

Show how full your cup is with stress.

Write your small stressors in the speech bubbles from the small water droplets and your big stressors in the speech bubbles from the big water droplets.

<u>This exercise should be done with your nurse so they can help you to manage your stressors.</u>

MY STRESS CUP



MANAGING MY MEDS & SIDE EFFECTS

Write the medications your doctor prescribes during your admission:

Medication: Dose:
Medication: Dose:
Medication: Dose:
Medication: Dose:
Medication: Dose:

Use this table with your nurse to better understand the good and bad parts of taking or not taking your medication.

<u>You can use the outcome of this in your ward rounds to tell the doctor and nurses how you feel</u>

What I like about not taking my medication	What I don't like about taking my medication
What I don't like about not taking my medication	What I like about taking my medication


15-minute exercise

MANAGING MY MEDS & SIDE EFFECTS

Sometimes your medications will give you side effects.

When you are put on a new medication, use this chart to mark how it makes you feel.

Compare how different medications make you feel.

Work through this with your nurse and use it in ward round so your care team can understand how you are feeling and help you find the medication that is right for you.

1 = no side effects, 5 = worst side effects.

	1	2	3	4	5
MEDICATION: DOSE:					
MEDICATION: DOSE:					
MEDICATION: DOSE:					
MEDICATION: DOSE:					
MEDICATION: DOSE:					

PART 2

WARD ROUNDS & WEEKLY PLANNER

Helping you organise ward rounds, plan your days and chart your progress

WEEKLY PLANNER

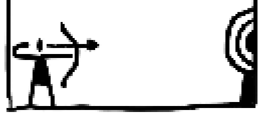
Ways to use this planner:

1) Schedule 1:1 time with your nurse
2) Record time and day of group activities
3) Make note of important appointments
4) Plan activities to do when you get S17 leave

** If you need more than one week, ask your nurse to print you out more pages **

THIS WEEK'S GOALS

11/05 - Go to the gym



NOTES

MONDAY

11am - 1:1 time with my nurse

THURSDAY

2pm - OT group

TUESDAY

FRIDAY

WEDNESDAY

WEEKEND!

WHAT ARE WARD ROUNDS?

Ward rounds will play an important and beneficial role in your care.

They will happen once a week.

The goals of ward round are to:

-

Have calm conversation with staff about your care

-

Find the best medication for you

-

Discuss your progress

-

Have your voice heard

You'll be given a 'preparing for my ward round' worksheet at the end of each ward round.

This will help you to plan what to say at your next ward round.

Ask your nurse to help you fill this in if you need help.

Here are some illustrations of what ward round may look like..

There may be several professionals sitting around the table.

Some professionals who might be at the table will include your consultant psychiatrist, a nurse, people from your community care, the OT, or pharmacist.

You can bring a relative, carer or advocate to your ward round.

If you feel overwhelmed by the amount of people at your ward round, you can request that fewer people attend.

If you have any questions or you want some help to prepare for your ward round, speak to your nurse and ask for a 1:1.

Preparing for my ward round

It is important you go to your ward round so you can talk about your care and raise any concerns you may have

Bring this to your next ward round so you can remember the things you want to talk about

Write down any questions you may want to ask in ward round

Some questions might include:
- What can I do to improve my mental wellbeing
- Are there any medications that may help?
- What help is available for a specific problem or issue you're having?

☑

☑

☑

☑

☑

☑

Things the doctor may ask you in ward round:

How are you feeling today?

How is your medication?

How are you coping on the ward?

What are your goals for ward round?

- ○
- ○
- ○
- ○
- ○
- ○

The box below lists areas of your life you may wish to talk about at ward round.

Try to fill this out on the day of your ward round.

1 = awful, 5 = excellent

	1	2	3	4	5
Mood	🟥	🟧	🟨	🟩	🟦
Anxiety	🟥	🟧	🟨	🟩	🟦
Thoughts	🟥	🟧	🟨	🟩	🟦
Sleep	🟥	🟧	🟨	🟩	🟦
Appetite	🟥	🟧	🟨	🟩	🟦
Exercise	🟥	🟧	🟨	🟩	🟦
Relationships	🟥	🟧	🟨	🟩	🟦
Social life	🟥	🟧	🟨	🟩	🟦
Work / study	🟥	🟧	🟨	🟩	🟦
Drugs / alcohol	🟥	🟧	🟨	🟩	🟦
Medication	🟥	🟧	🟨	🟩	🟦
Physical health	🟥	🟧	🟨	🟩	🟦

PART 3

MANAGING MY EMOTIONS

Some time for reflection and understanding how you feel

REFLECTION MIRROR

'Mirror' by Cady Stone
(service user expert by experience)

Mirror suggests the idea of walking through an empty corridor, like the ones I experienced in an acute ward.

It represents that terrifying moment of being 'locked in' and not being able to leave to get fresh air outside.

The colours reflect the wonderful daylight once I was able to go out on escorted leave.

The title, 'Mirror', refers to the self reflection that can lead to recovery.

UNDERSTANDING HOW I FEEL

Some people may find it difficult to give a word to the emotions they are feeling.

Use the emotions table on the next page to find the words to explain how you feel.

You can use this on your own or as an activity to do with your nurse.

HAPPY

CONTENT · GLAD · JOYFUL
CHEERFUL · IN HIGH SPIRITS
JOVIAL · OVERJOYED
THRILLED · DELIGHTED · PLEASED
ON CLOUD NINE

GUSHED · EXCLAIMED
CHEERED · JOKED · BRAGGED
GIGGLED

SAD

DEPRESSED · GLOOMY
MISERABLE · CHEERLESS
HEARTBROKEN · GUTTED
DEMORALISED · SHATTERED
CRUSHED · DEVASTATED

SOBBED · GRUMBLED
WEPT · FRETTED · MUMBLED
SPLUTTERED

RELAXED

CALM · PEACEFUL · COSY
STRESS-FREE · COOL
BLISSFUL · SERENE
COMPOSED · UNRUFFLED
UNPERTURBED

UTTERED · STATED · AGREED
CHATTED · GOSSIPED
DISCUSSED

ANGRY

ANNOYED · IRRITATED
FUMING · LIVID · CROSS
FRUSTRATED · ENRAGED
INFURIATED · INCENSED
UP IN ARMS

SNAPPED · YELLED · BOOMED
SHRIEKED · BELLOWED
GROWLED

FRIGHTENED

TERRIFIED · ALARMED
STARTLED · ANXIOUS
UPSET · PANICKY · WORRIED
DISTRESSED · DISTRAUGHT
TROUBLED · IN A STATE

STUTTERED · GULPED · WAILED
GASPED · STAMMERED
WHISPERED

LONELY

LOST · FORLORN · ALONE
ABANDONED · DESERTED
FRIENDLESS · ISOLATED
LONESOME · SOLITARY
CUT-OFF

SIGHED · MOANED · BAWLED
MUTTERED · GRUMBLED
SNIFFLED

PART 4

PREPARING FOR DISCHARGE

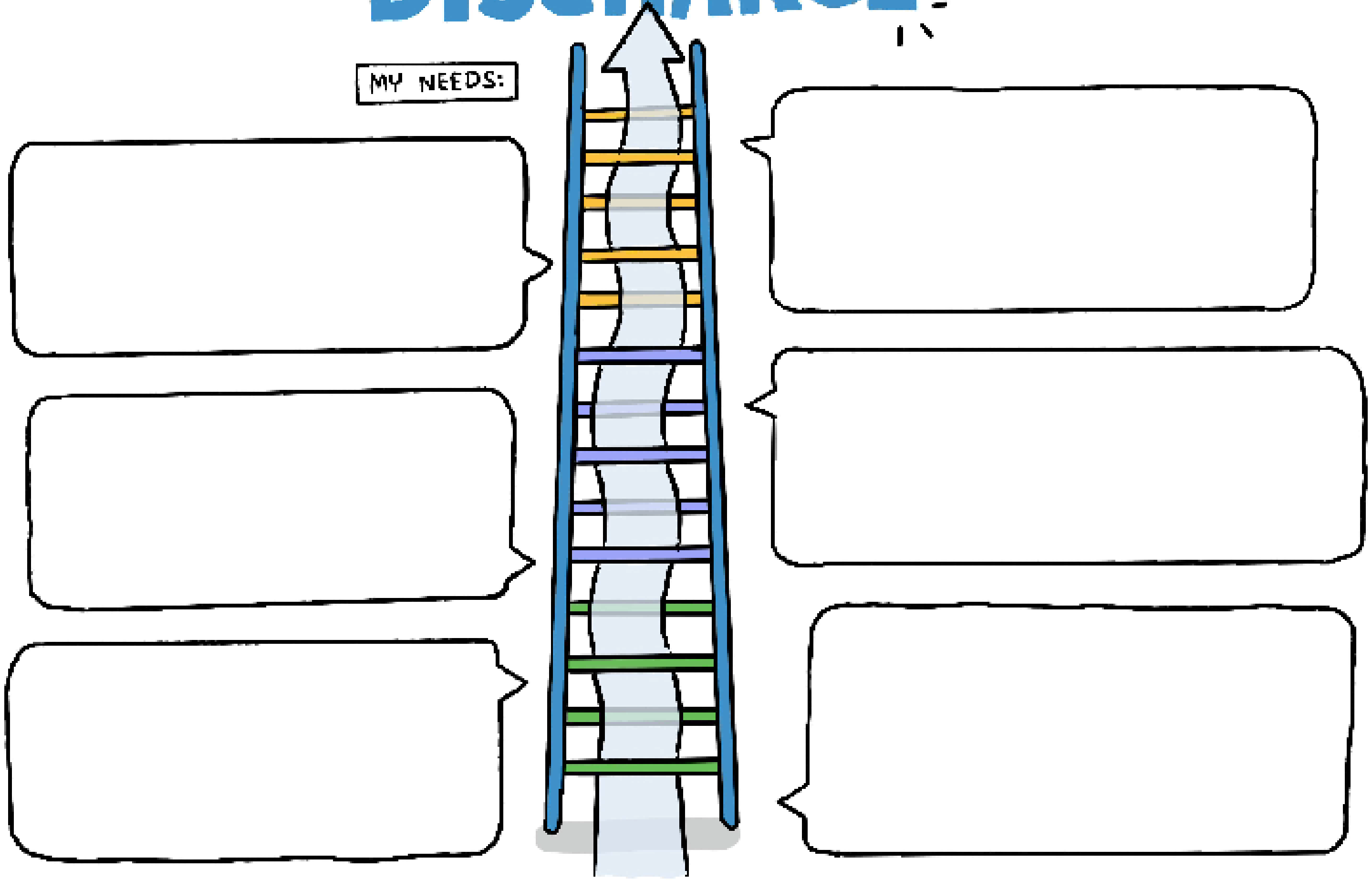
Building support for once you're home

MY DISCHARGE NEEDS

Use this ladder to write down things you'll need in place for when you leave hospital.

Show it to your nurse so they can help you put these things in place.

DISCHARGE

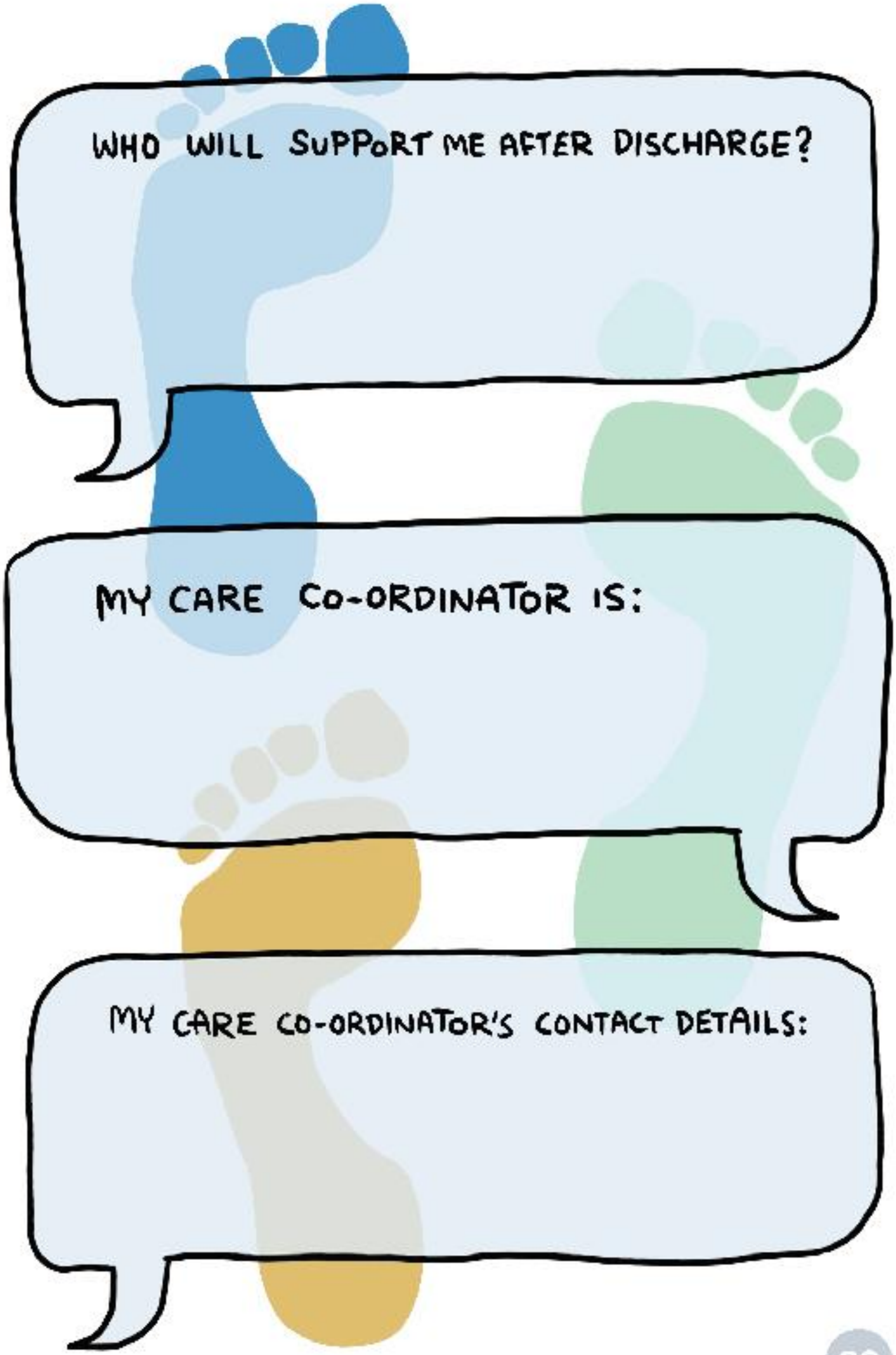


MY NEXT STEPS

MY DISCHARGE DATE:

WHERE WILL I BE DISCHARGED TO?

DATE OF FOLLOW-UP APPOINTMENTS:



WHO WILL SUPPORT ME AFTER DISCHARGE?

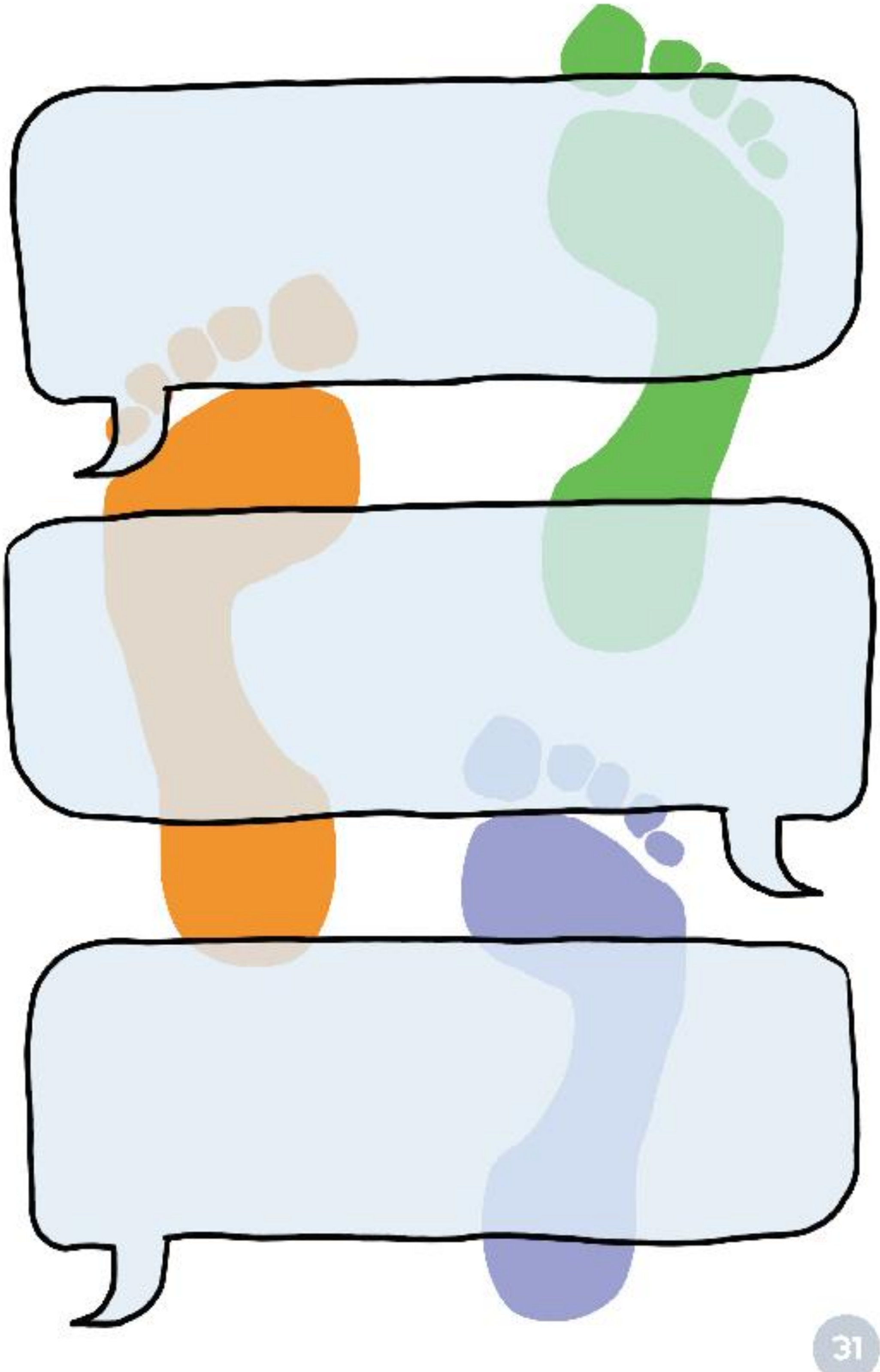
MY CARE CO-ORDINATOR IS:

MY CARE CO-ORDINATOR'S CONTACT DETAILS:

MY DISCHARGE MEDICATION IS:

QUESTIONS FOR MY INPATIENT CARE TEAM:

QUESTIONS FOR MY CARE CO-ORDINATOR:



USEFUL CONTACTS

Use these pages to make note of the people you will call if you're not feeling at your best.

NAME:
PHONE:

NAME:
PHONE:

NAME:
PHONE:

NAME:
PHONE:

NAME:
PHONE:

NAME:
PHONE:

C1.7 Door sliders with accompanying message on service users’ doors, linked to the ward’s hourly observation sheet

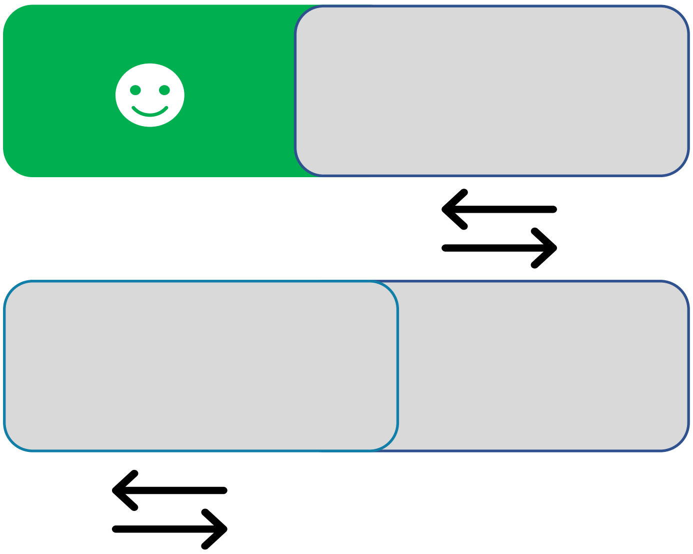
Would you like to talk?

Sometimes we don’t want to talk because we feel too distressed or we don’t have the right words to say.

That is okay. Many people feel this way.

But it’s important to catch the moment if you feel like talking.

If that feeling comes, slide the card on the front of your door to green and a nurse will arrange some time to have a chat with you.



Date:

THAMES WARD 24 HOUR STANDARD OBSERVATIONS

Number of patients:

Room	Name of patient	8	9	10	11	12	13	1330	14	15	16	17	18	19	20	21	22	23	00	01	02	03	04	05	06	07	0730
1																											
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											
13																											
14																											
15																											
16																											
17																											
Sleep over																											
O/L																											
O/L																											
Colour of card on patient’s door																											
Did you engage with the patient?																											
No. of patients off the ward																											
No. of patients on the ward																											
Initials of nurse																											

Dark shaded times where incoming and outgoing nurses do checks together

Codes to record patients' whereabouts and therapeutic engagement needs					
INT – interview room	**CLR** – clinical room	**SEC** – seclusion	**AW** – AWOL	**SIC** – sitting in chair	**SICA** – sitting in chair asleep
C – corridor	**MDT** – meeting/ ward round	**STM** – St. Marys	**EL** – escorted leave	**SOB** – sitting on bed	**COM** – male computer area
BAL – balcony	**DR** – dining room	**GYM** – gym	**UL** – unescorted leave	**If lying or under covers:**	
GR – group room	**OT** – OT group	**ADL** – ADL kitchen	**CL** – community leave	**LS** – left side	**RS** – right side
TV – television lounge	**L** – laundry	**B** – bathroom	**OL** – overnight leave	**BK** – back	**F** – front
NO – nursing office	**FL** – female lounge	**S** – shower	**IF NO MOVEMENT OR CHANGE ENTER ROOM AND CHECK ON PATIENT**		
DO – doctor's office	**FLB** – female balcony	**T** – toilet			
Colour of engagement sign:	**G –** Green	**B –** Blank			
If sign is green:	**Y –** needs have been met	**N –** still requires therapeutic engagement	**N/A** – sign is blank	**If unable to engage immediately, tell patient what you will do to address their needs**	

C.2 – Invitation to co-design events

Dear

Service user feedback event – Thursday October 31st from 1100 - 1500
Joint patient-staff event – Tuesday November 12th from 1245 to 1645

I am writing to invite you and one relative, friend or carer to come along and take part in two events that follow on from the interview that I recently had with you.

The first is a service user feedback event where you will have the opportunity to meet other service users who have been interviewed. This will be a chance for you to view the final version of the film that has been compiled from the interviews and to share and talk about your own and other service users' experiences of nurse-patient engagement. You will also be helping to shape the next step of this project and develop ideas to feed into the process of bringing about changes and improvements to nurse-patient interactions on acute mental health wards.

The service user feedback event will take place on:

Date: Thursday October 31st 2019
Address: St. Charles Hospital, Mental Health Unit, Exmoor Street, London, W10 6DZ
Time: 1100 – 1500

Further to this session, we will then be holding a joint service user-staff event where you will have the opportunity to, jointly with staff, identify shared priorities for improving nurse-patient interactions on acute mental health wards at CNWL.

The joint service user-staff event will take place on:

Date: Tuesday November 12th 2019
Address: St. Charles Hospital, Mental Health Unit, Exmoor Street, London, W10 6DZ
Time: 1245 – 1645

Please could you let me know ASAP by telephone: 07963436817 or by email to sarah.mcallister@kcl.ac.uk whether you and a friend, relative or carer will be attending either or both of these events.

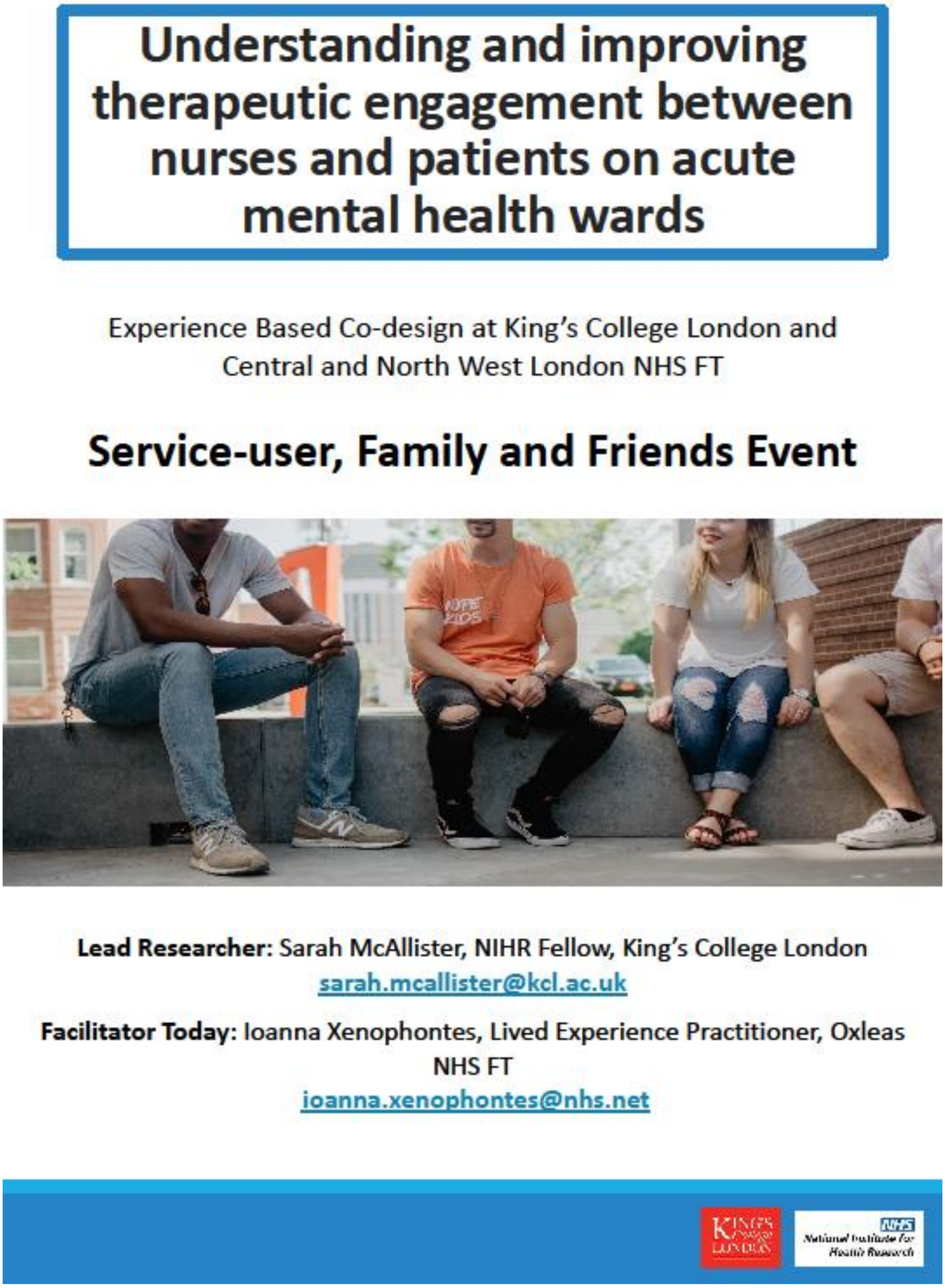
At each event we will be serving lunch and refreshments, so please let me know if you or the person who is attending with you has any specific dietary requirements or any other needs that need to be met to enable you to attend.

We will be happy to reimburse you for any travel costs associated with attending. As a token of appreciation for your time and effort we will also give you a £20 Love to Shop voucher for each event you attend.

I look forward to meeting with you again and hearing your ideas around improving inpatient services for our service users.

Kind regards,
Sarah McAllister

C3 – Workbooks given to participants at the co-design events (example is the service users' workbook from their feedback event)



Understanding and improving therapeutic engagement between nurses and patients on acute mental health wards

Experience Based Co-design at King's College London and Central and North West London NHS FT

Service-user, Family and Friends Event

Lead Researcher: Sarah McAllister, NIHR Fellow, King's College London
sarah.mcallister@kcl.ac.uk

Facilitator Today: Ioanna Xenophontes, Lived Experience Practitioner, Oxleas NHS FT
ioanna.xenophontes@nhs.net

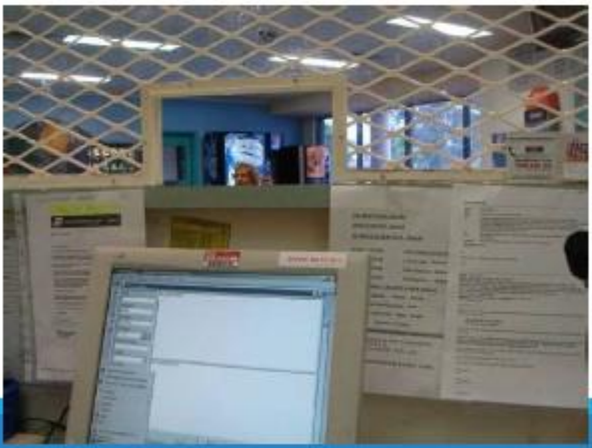
Today's agenda

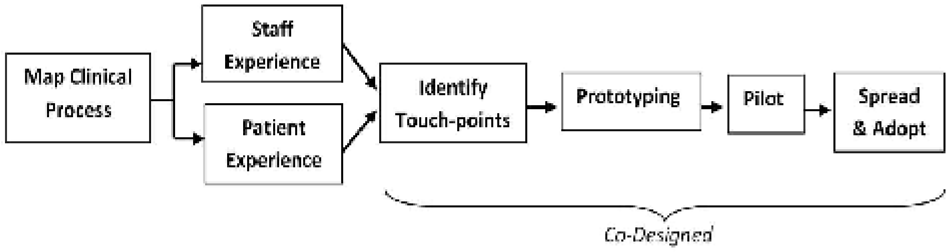
- Welcome and introductions (20 mins)
- What is EBCD? (5 mins)
- Where is the project so far? (5 mins)
- Review the film (30 mins)
- Discussion & feedback on film (30 mins)
- Lunch (30 mins)
- Emotional mapping exercise (45 mins)
- Questions / thoughts (10 mins)
- Evaluation (5 mins)

What is EBCD?

RECEPTION:
PATIENT EXPERIENCE

RECEPTION:
STAFF EXPERIENCE





Application of design principles to the NHS

Aims of the project

To work with you and staff from Thames ward to, together, come up with ways of improving nurse-patient interactions on the ward

To try out these new ways on Thames ward and see whether nursing care and **patients' perception of** inpatient care is improved

So far we have...

Looked at what past research has said to develop a tentative model of nurse-patient engagement

Conducted 80 hours of observations on Thames ward & Ganges ward to see how nurses currently interact with service users

49 patients on Thames ward & Ganges ward have filled in questionnaires to tell us their current perceptions of inpatient care

Interviewed 12 staff from Thames ward to find out their experiences of interacting with service users and how they think we can improve nurse-patient interactions

Interviewed 16 service users (7 filmed) to find out their experiences of interacting with nurses and how they think we can improve nurse-patient interactions

Things you said were important to you

Do not dismiss me or make me feel like a burden

- Not taking your concerns into consideration
- Not taking your physical health seriously
- Blaming your reactions on your mental health
- Respond to my requests in a timely manner

When you tell me to do something, please give a reason for it

- **Explain what you're doing**
- Be clear about your reasons
- Introduce yourself to me
- Do not coerce me into doing something

Please just give me some of your time

- Listen to me
- Understand me and my situation
- I was left on my own
- Lack of engagement results in misunderstandings of my problems

Validate me as a person

- Treat me like a human being
- Please approach me / help me to approach you
- Forgive and forget

Things I found unhelpful

- Being on the computer all the time
- Need privacy for one to ones
- One size fits all / robotic care

Things you said that get in the way of quality interactions with nurses

CAPABILITY TO INTERACT	1) My illness makes it difficult to engage sometimes 2) The medication makes it difficult for me to interact **3) The nurses don't have the skills or knowledge to deal with my problems**
OPPORTUNITY TO INTERACT	1) The overall ward environment is untherapeutic / not set up for good therapeutic engagement 2) There needs to be more nurses on the ward and fewer bank staff 3) Nurses are always on the computer or writing notes 4) Other service users are better to talk to than nurses
MOTIVATION TO INTERACT	1) Things will be made worse if you approach the nurses and show frustration **2) It's the OTs and activities coordinators who do a majority of the engagement** activities **3) The nurses won't understand me if I speak to them anyway** 4) The nurses ignore me when I try to approach them 5) Fear (of being restrained, or having your leave taken away, or being ignored) **6) You don't want to interact because nurses have forced you to do things you don't want to do**

Chapters of the film

CHAPTER ONE:

Interactions that service users found helpful

a) The importance of listening
b) Ordinary talk
c) Seeing the person beyond the patient

CHAPTER TWO:

Lack of therapeutic engagement whilst on the ward

CHAPTER THREE:

Lack of engagement leads to service users feeling fearful on the ward

CHAPTER FOUR:

What therapeutic engagement means to service users

CHAPTER FIVE:

***Service users' ideas for improving nurse**-patient therapeutic engagement*

a) Training
b) Changing relationships
c) Making notes and handover work for everybody
d) **"Don't forget the Jam"**
e) Do not make assumptions

Please use the following blank pages to write down any thoughts you have about the film.

This could be about how it makes you feel, if you think anything needs to be added or removed, or anything else that comes to mind.

Points to think about for the joint service user-staff event

Write improvement priority here

Why this should be improved

The ideal solution

Who needs to be involved

Additional support

If you feel like you may need some additional support after the event today, this can be sought from your care coordinator or GP.

Alternatively, you may contact Sarah McAllister, the lead researcher, on 07963436817, email: sarah.mcallister@kcl.ac.uk

You may also seek advice from the CNWL Patient Feedback and Complaints service on 0300 013 4799, email: feedback.cnwl@nhs.net

Thank you for your participation today!

C4 – Touchpoint ranking sheet

Understanding and improving nurse-patient therapeutic engagement on acute mental health wards

At the service user feedback event we held on October 31st, we discussed with you and other service users your main priorities for improving nurse-patient therapeutic engagement.

We were able to bring together your priorities and group them into 4 main themes:

1) **Communication needs to be improved**
    - Help me to approach you / give me different ways to communicate with you
    - Do not dismiss me / take my concerns seriously
    - We need calm, rational conversations with nurses

2) **Treat me like a human being**
    - Do not give robotic care / one size fits all care, we are individuals

3) **Forgive and forget**
    - You do not see me at my best
    - Please be motivated to know who I am as a person, not just as a diagnosis

4) **Help me help myself**
    - Staff need to create a safe space for me to interact
    - Support me / give me practical advice
    - Explain why somebody is on the ward early on in admission and tell them what will happen to them (be very specific about this)

We will take forward 3 of these 4 priorities to the joint co-design event with yourselves and staff from Thames ward.

Please rank these priorities from 1 – 4, with 1 being your highest priority and 4 being your lowest priority for change.

Four main priorities to come from the feedback event	Rank

1 = most important; 2 = 2nd most important; 3 = 3rd most important; 4 = least importan

C5 – Touchpoint film script

Service user ID	**Script**	**Film: touch point number** **Audio: time codes**	**Time Codes (Edited Film)**
Title	Understanding and improving therapeutic engagement between service users and nurses on acute mental health wards [Appear first] A film produced by King's College London as part of the UNITED study. [Appear second]		
Title	This film draws from 16 interviews with service users and carers who have had or cared for somebody who has had an inpatient stay at Central and North West London NHS Foundation Trust. [Appear first] It is about their experiences of nurse-patient interactions and their recommendations on how these interactions can be enhanced to improve the ward experience for both service users and nurses. [Appear second]		
CHAPTER ONE TITLE	**"I think she just struck a chord with me…": Interactions that helped**	Total time for chapter:	
SU8	Yeah, it kind of grounded me and brought me back to the moment that mindfulness thing that everybody does these days, I guess it was that sort of kind of thing and they were really engaging in logical conversations. And they would remind me of things like you do have a choice, you know, like you have a choice to get better for a very long time and I thought that they were controlling me and I had no choice in what was happening and actually realised that's the way they, a Nurse actually said to me quite frankly one day, she went, you have a choice, you can stay in this room, cause I was in solitary confinement, or you can make the decision to get better and work with us	Clip 1: start time: 00:28:16:15, end time: 00:28:57:00	
SU8 Subtitle	Insert blurb when she gives it to me…		

SU11	I just think you know if you just learned to listen, that's quite often all somebody wants, or what they are trying to do is fix it and it doesn't need fixing, it just needs to be heard [yeah] you know by the staff, they need to hear what that patient is going through and why they feel like they want to do what they want to do, what's the reason behind it, maybe that's self-harm, suicide, you know, delusional belief, you know they need to understand that's a mental disorder and needs the help and support from the nurses because it's the nurses that refer back to the consultant anyway, it's the nurses that see you all day, every day, the doctors see you for 20 minutes once a week sometimes, that's it, so it's all from the perspective of the nurses really so you need to get on with the nurses you know to be able to get discharged for example.	Clip 1: start time: 11:44:31:07, end time: 11:45:44:06	
SU11 Subtitle	Insert blurb when she gives it to me.		
SU2	They weren't all bad, I mean, I had like, umm, (names), umm, they were there from day one and they were very good to me, they listened to me, comforted me… …Umm, yes, umm they would approach me in a really nice comfortable way. **Make sure the phone ringing is cut out and is it possible to make it so we can't hear the names that he says?**	Clip 1: 1) Start time 2) time start: 02:03:47:03, time end: 02:04:22:03	
SU2 Subtitle	Insert blurb when he gives it to me.		
SU6	They wouldn't be sat at their computers all day long, or in handover meetings. They would be out, walking around the ward, checking who's spending too much time in their room and finding out why.	Audio 1:	

		Start time: 00:41:48, end time: 00:42:04	
SU6 Subtitle	Insert blurb once she’s given it to me.		
C1	You know erm, one thing that I've experienced erm, myself as - erm, directly myself and indirectly with my daughters and as an Expert by Experience doing inspections is that erm... you know, listening [mhmm] could be the key [mhmm] to everything. Can you imagine just listening? You know, we may, we may think of - I don't know what strategy, what medication or what type of ward or, or... but honestly, listening could be the key to everything. Such an easy thing but I can tell you that there is a lack of listening. When you, when you experience mental health distress, you need someone just to be there to listen to you.	Clip 1: start time: 03:22:59:16, end time: 03:24:13:05	
C1 Subtitle	''Vittoria is a lived experienced mental health advisor with direct (as a service user) and indirect (as a carer) experience. She is an active campaigner on mental health and very passionate about supporting other people to have a say about the services they receive. [Appear first] Since 2015 Vittoria has become an active leader of co-production in the North West London area challenging, informing and implementing redesign of services and standards for care and support''. [Appear second]		
SU7	Even just normal chat about the weather. I wasn’t looking for a deep chat about my feelings, you know, I don’t want to do that. But, you know, if you’re not in contact with your friends, at some point you just get really, really lonely.	Audio 1: Start time: 09:57, end time: 10:13	
SU7 Subtitle	Insert blurb once she’s given it to me.		
SU1	Well I suppose being a bit, not over inquisitive where it’s obvious what they’re trying to find out is that oh you’re having some strange thoughts. It’s a difficult, you know, even I know, I appreciate it’s their	Touch point 4 Clip 1	

	job to find out what's going on sort of thing, but it's a matter of how you approach it in a kind of less direct way. Obviously if you're having strange thoughts having a sort of ordinary conversation, if you are having strange thoughts that would come out anyway I suppose.	time start: 01:30:02:13, time end: 01:30:39:06	
SU1 Subtitle	Ivan has had 6 ward admissions, all as an informal patient. Since his last admission at St. Charles, some time ago now, Ivan has been involved with service user led projects including collecting the views of patients on the wards at St. Charles and at other mental health units. [Appear first] Ivan is currently a service user rep on the care quality inpatient management group for St. Charles mental health unit. [Appear second]		
SU13	I think they would be just acting like a normal person would, I mean just talking to people about general things that are going on, you know, some sports and topical conversation pieces is perhaps going out playing basketball with people or attending some of the group activities and just sort of being there with the person, not just from the medication side of things cause otherwise I think people can form bonds or sort of start to stereotype people almost like, oh the nurses only give me my medication. The OTs only take me for my groups or my walk or whatever. And whether you know, the nurses can do them things as well, I mean it doesn't take a qualification to take someone for a walk so yeah.	Audio 1:	
SU13 Subtitle	Insert blurb when he's given it to me.		
SU3	If you had a question, he would always answer it, and if you had any kind of issues, you could bring it up during, he had relax and refresh, I think sessions, he used to run them and give people tea but he was always very friendly and very, someone you could talk to in confidence and be able to get an answer there and then so having more people like Tom would be maybe a better way of interacting. Cause some of the staff are very kind of like, you have a problem, they don't really know how to answer it, and you kind of, you don't have meaningful interactions with them, they're very heavy handed, very kind of, no, you're sick, you're going to take your medication and that's going to fix you. And I don't want to talk to you at all because they're just very	Clip 1: start time: 00:31:34:00 end time: 00:32:38:02	

	standoffish, whereas people like Tom were very kind of, you could talk to him about anything and he’d give you advice on anything which was quite good. ****Could you please edit out when he says the name Tom?****		
SU3 Subtitle	John is an individual who suffers from paranoid schizophrenia. He has been hospitalised 3 times in his life with his first hospitalisation being in 2016. He has now been stable on his current medication for about a year. [Appear first] He still remembers what life was like under section. [Appear second]		
SU9	They also have in the ward like table tennis and stuff like that so they want you to relax you when you are there, you know, just as they told you don’t worry, if it is a month, they are telling you you will be home soon with your wife and going for dinners and take walks, it makes you funny and gives you hope because I didn’t want to stay there, even though I said it is good there.	Audio 1:	
SU9 Subtitle	Peter and his wife Victoria have been married for X years. They came into contact with services in the UK when Peter’s medication had to be changed. They think mental health services in the UK are much better than back at home. (THIS MAY POTENTIALLY CHANGE)		
SU12	I liked talking to the psychologist, and I appreciate the friendliness of the nurses, like some of them were like friends, you know, you make a bond with them like a friend.	Clip 1: start time: 00:27, end time: 00:36 FILM 2	
SU12 Subtitle	Insert once he’s given it to me.		
SU8	Let’s go to the shops, let’s go to Tesco’s, like be allowed out on escorted leave and be practical and say things like, right, let's do your laundry or come downstairs to the vending machine and let's get you a Fanta, or whatever, you know, or let’s go make a fruit salad or sometimes they let me cook and there was always this, at the time I thought they were silly, garden experience or like, you know, that kind of thing, and	Clip 2: start time: 00:25:32:13 end time: 00:26:01:21	

	those things were you know, they were very babyish, but they were they were very helpful.		
SU2	What did work was the umm, when they did the umm, rota for activities that you could do. Like poetry classes and music, like, ahh, English lessons, sports like badminton, which was great! I mean it meant that I could umm, get out of the hospital and do some physical activities and keep my mind occupied, umm, I, I really enjoyed that.	Clip 2: start time: 02:10:50:08, end time: 02:11:23:14	
C1	'What's wrong with you?' or 'What's wrong with him?' No! 'What happened to him? What happened?' I wish someone asked me… **(…I really started to understand where I was coming from and) CUT THIS** …I really wish that someone back would have said, 'Hang on a minute. What happened to you? What happened to your life? To your st-, - so tell me your story.	Clip 2: 1) start time: 03:43:27:11, end time: 03:43:42:24 2) time start: 03:44:10:04, time end: 03:44:30:01	
CHAPTER TWO TITLE	**“I was left on my own and ignored”: Lack of therapeutic engagement whilst on the ward**	Total time for chapter:	
SU3	Me personally, I would have liked long one to ones so someone just asking me how my day’s going, or I mean, a lot of the time you're just ignored, so if you went to the, even if you want to go for anything, for a question, if you went to the reception area, no one would acknowledge your presence, no one would be like, hey John, how’s it going, you know, how are you doing? It was all kind of like just ignore them, continue doing what we’re doing and that kind of puts up a wall and creates an atmosphere that’s very tense, even on open wards, it was a very tense atmosphere, it was like us	Clip 2: start time: 00:50:23:18, end time: 00:51:17:04	

	and them instead of all of us together, it was very kind of confrontational just passively confrontational.		
SU6	My experience in the main is that the nurses are not terribly engaged with the patients, they're not really very interested in the patients, they're not interested in their back stories, why they're there. They're not interested in their medications, other than to coerce them into taking them if necessary, but if you have a question regarding medication or if you have a question regarding your treatment, then all you get is 'talk to the doctor'. But, you know, these are qualified people and their pronouncements and their records are being used in tribunals, they're being used to talk to the consultant about how you're supposedly progressing on the ward, which is informing the consultant's clinical decision as to when you're going to be ready for discharge etc, I mean very, very important. But in fact, you know, any mental health patient will tell you that they're pretty much largely to be found at their computer screens, very often looking at kind of villas in the Caribbean [laugh] I'm afraid it has to be said [laugh].	Audio 2: start time: 00:01:40 end time:00:02:54	
SU11	There are some occasions when you ask for a chat, you know, at 3 o'clock in the afternoon and it gets to 9pm and they are going home soon and it's like thank you very much and for a one to one sometimes they forget and I don't like to pester them, I sit there quietly, just requesting it every so often, but I think sometimes if you make a fuss, that's when you get what you are asking for, which shouldn't be like that, you know, the more you shout and scream the more likely you are to get what you are asking for which really it should be the other way round, if you sit quietly and just ask now and again, then the nurses should come to you, that's what I believe.	Clip 2:	
SU7	I don't think they ever asked me, are you okay to go out, do you have suicidal thoughts, and it was up to me to self-manage which was fine, actually no I did self-harm a few times there so, not there, actually there, whatever. But yeah sometimes it's just useful to be prompted…	Audio 2: 1) start time: 11:09, end time: 11:29 2) start time: 11:34, end time: 11:45	

	… it was kind of done on the, because I was washed and dressed and functioning and smiling and being polite, oh she's fine.		
SU2	They spent a lot of time behind the reception desk or in a cubical, umm, I can understand that it was a very busy ward and they have a lot of patients to deal with, but for me, a lot of time I just sat there and watched and all I could see was them writing stuff on a board or there would be the telephone would ring or, you know umm, professionals would run around like mad rabbits not really giving any attention to the patients. I was left on my own and ignored.	Clip 3: time start: 02:03:03:22, time end: 02:03:42:05	
C2	I said to them at the beginning when he was admitted to hospital, immediately, be careful because Victor can win an Oscar when he's sick, he is pretending to take his meds but he's not taking them… …And it was true, they didn't know this, I was there when it was medication time, I was sitting like here, he was drinking there his meds and he spit into his cup and they didn't even see… … I said to them, before I noticed, I said to them, what is happening, because I came in one day to visit him and he didn't want to see me, usually he doesn't do that when he is taking medication and I said, I was concerned, and I said what is happening, ten days ago he was fine, now what is happening? IV: When they changed the medicine… …And they didn't change it, they increased it, they didn't change it and I was crying, what's happening, can you explain it because it was very… sorry… [she gets upset] it was a very stressful period for me, it shouldn't have happened you know because he was fine for six years he was out from the hospital and last summer [she sighs]… … I tried to explain that that isn't Victor, Victor is in that state and they just didn't want to listen… ****Can we please edit out the parts where she says Victor?****	Audio 1:	

C2 Subtitle	Peter and his wife Victoria have been married for X years. They came into contact with services in the UK when Peter's medication had to be changed. They think mental health services in the UK are much better than back at home. (THIS MAY POTENTIALLY CHANGE)		
SU3		Clip 3:	
SU10	The other time I was in in-patients, one of the nurses was shouting, not at me but somebody else, and I don't know and started to shout like, no, no, no, like very, very heavy and I said oh my god, I didn't even want to go close to there because I didn't want the stress again myself you know so I keep away but I can hear the shouting, so these are the type of things they need to change.	Audio 1:	
SU10	Insert blurb once he's given it to me.		
SU8	It was like having a shadow, even when you're in the loo, but you get used to it I guess, yeah, having people talk to, I remember not being allowed to leave my room and I felt like a kid again. A lot of them are very curt and quite sarcastic as well. I was in a bad place because I'd been attacked and I just remember one of the male nurses that was assigned to me quite often he was quite high up in rank and he **and** my mum was very, they used to talk a lot and I was very paranoid thinking he was trying to kill me and stuff and you know, my mum seemed to get along quite well with him and she would, you know, ask him a lot how I was doing because they weren't allowed to visit and he just literally put a newspaper up in front of her and himself and sat there and I wasn't allowed out and you know, eventually I lied and said I needed the loo and got out, you know.	Clip 3: start time: 00:59:56:23, end time: 01:00:58:00	
C1	You know, what really strikes me when, when, when I am on erm... you know, an acute ward is seeing the people so much isolated [mhmm]. They're isolated. Completely isolated [mmm]. You feel that it's, it's them and us but it's them. It's them! It's them! On the ward, it's them in their rooms. It's them - you know, like - it's, it's... this is the, the, the thing that I feel it's them.	Clip 3: start time: 03:49:56:13, end time: 03:50:46:18	
Title			

	Treat me like a human or responding appropriately to the situation/one size fits all care/respond in a timely manner (???)		
CHAPTER FOUR TITLE	**“ “: What therapeutic engagement means to service users**	Total time for chapter:	
SU1	Well to be honest, I wanted to delve into what had been happening with me in the past and the present, why have I ended up the way I am, rather than get involved in very practical stuff, like to do more exercise and that kind of thing… …if I sort of feel as though I have lost my own identity kind of thing, I don’t think that having an exercise regime or eating healthy is going to get me to grips with those kind of things**.**	Touch point 6 Clip 2 1) start time: 01:57:21:17, end time: 01:57:39:16 2) start time: , end time: 01:58:07:10	
SU2	I kind of feel like it’s what’s going on already with the nurses but without the patients. So you have nurses and cc and social workers and all these expert by experience people milluing around trying to do their job but not really putting the patient first.	Clip 4: start time: 02:40:44:11, end time: 02:41:05:19	
SU13	I’d sort of describe it as a sort of unwritten agreement between service user and professional to help that service user recover at their own pace and their own definition of recovery and that it should be the professional’s duty to help that person do that in any way possible. So whether that’s through like medication or whether that’s through trying to get them reengaging with other people or activities and just try and make that person find themselves again because from my experience, a lot of people and myself included went in and they were completely lost and sometimes medication makes that feeling even worse cause you can be really drowsy and tired	Audio 2:	

	and just having people around you trying to help you in a none like pressured way and almost like teaching you how to be yourself again**.**		
SU3	Therapeutic engagement, using therapies to come out with positive actions or positive results that help mental health, so that's basically how I understand, I don't know if that's right… … Something you can do with your hands, or maybe a group work, just mind yourself that would help in a positive way with mental health…	Clip 4:	
C1	Well, the good interactions is - erm, is, is, basically, what - erm, you know, what, what... what people suffering mental health distress needs is someone that can just sit down there [mhmm] and just be there because sometimes, you know, silence can be very much enough and er, or maybe an eye contact in a certain way and - erm, and there are these, you know, kind of relationships on the wards [mhmm] where you, you observe that. That eye contact means everything [mmm]. So when the nurses may say that, 'Oh, they want us to sit there for an hour,' it's not really true, you understand? Because erm... unfortunately er, you know, reality is that - especially those who suffer severe mental health conditions - very often are abandoned by the families, so they are lonely - they are alone and, and that's why, you know, a, a, a nurse could really be - you know, could really represent for them something that - you know, that... one word, one eye contact, just to... to give them that reassurance that it's okay.	Clip 4: start time: 03:40:18:02, end time: 03:42:15:05 CHANGE START TIME HERE AS CUT BIT IN RED	
SU6	Well I think, you know, in its essence, it's feeling that you're being listened to, and cared about again.	Audio 3: Start time: 00:51:04, end time: 00:51:17	
CHAPTER FIVE TITLE	**"I had no idea what the hell was going on": Fear**	Total time for chapter:	
SU2		Clip 5:	

	I don't think the nurses are capable of dealing with a crisis. It's a bit like locking you up in a room and not being able to get out and it's really really scary.	start time: 02:16:33:11, end time: 02:16:51:09	
SU8	I think a lot of the nurses, not all of them, but some of them just see it as a nine to five, they just come and have to do work, its your job and I think agency staff nurse quite often, maybe I'm getting a bit paranoid but I get the feeling that they're just, you know, they just wanted to get home and have dinner, kind of thing. But you know, they didn't go out of their way to make my life miserable, they were just a bit kind of, I don't know what the word would be, I guess from my point of view, considering how sick I was, umm, very frightening.	Clip 4: start time: 00:31:37:12, end time: 00:32:11:07	
SU9	**…** I can tell you one thing Sarah, always when I'm in hospital, I was in there now four or five times, always when I'm in hospital I have pressure in the mind that they want to kill me with the medicine and so that's why I'm spitting, refusing and stuff like that but I'm not in a place like normal, that's why I wanted to explain.	Audio 2:	
C1	We start ruminating and ruminating makes us become, you know, worried and then the fear. The fear is another poison. So all these things together, it, it, it makes your, your head like you understand that, 'No, I can't take it,' and, and the worst thing that can happen is to have those feeling and, and be alone... and be isolated and actually, you know... I need someone, someone that I can talk to; I can relate to; that I can share this, this problem [mhmm] but the problem is that, you know, the world is becoming so hectic that there is no more time to listen to people. We don't have even time to listen to ourselves, so in the end, you find yourself, you know, alone and, and these thoughts, they are coming even more and, and your head is going crazy	Clip 5: start time: 03:25:25:18, end time: 03:26:47:01 CHANGE END TIME HERE CUT BITS IN RED	
SU7	But it was really, really quite scary, I had no idea what the hell was going on. And then yeah I was show around by somebody and then luckily they put me into the women's area which is a little refuge to say the least because it's nice and quiet and clean and peaceful most of the time.	Audio 3: Start time: 05:00, end time: 05:23	

SU3	If people know what these drugs do to people like 100% understand or believe that the medication that turned me into a zombie were given to me because they were turning me into a zombie, so if I had some kind of heads up that that was happening, it would have been a lot more less frightening, basically, it was a frightening experience cause I was worried that I was going to be like that for my entire time and at the time I was living in hostels, by myself and I was thinking that if I'm this zombified in hostels by myself, someone could take advantage of me, there was no way I would be able to interact properly, there was no way I could find a job, there would be no, none of those things would happen. So if more emphasis was put on what side effects were experienced, so if they were honest about what was going to happen, it might be less frightening experience for an individual.	Clip 5: start time: 00:15:36:06, end time: 00:16:44:15	
SU6	My view is that we have fewer rights than prisoners actually, and we're locked away where nobody can really access us properly, visitors are not allowed to see our rooms and the conditions and that kind of thing and … it can be a very lonely place. You're scared of being held down if you take the nurses on, they always have that option, I've had it happen to me…	Audio 4: start time: 00:04:22, end time: 00:04:59	Could potentially cut before "… it can be a very lonely place" if film too long.
CHAPTER SIX TITLE	" ": Ideas for improvement	Total time for chapter:	
SU11	I think just having more regular training, I think the training should be from service users, delivering the training, I mean I've done that in the past and it's worked quite well and I just think, you know, just to kind of understand a bit more what's going on, you know what's going on for this person. it's like she has spent a whole year in a therapeutic community several years ago so my personality disorder is much more managed now than it was in 2005 but sometimes they don't think of that they are just oh she's got a personality disorder, this is all about your personality disorder, and that's what was happening on the PQ ward, the nurse was like oh you don't have bipolar, you just have a personality disorder, that's what's doing this and I thought I spent £800 the day before I came into hospital, that's not personality disorder, that's mania and she just couldn't see that at all, so that was really upsetting.	Clip 4: start time: 11:41:08:23, end time: 11:42:28:18 DELETE TEXT IN RED AND CHANGE END TIME	

SU2	Definitely, yeah! Nurses need to be trained about how they deal with patients on the ward because some of them can be violent and aggressive and I've never been like that. I've always been passive, you know, sort of um, been very quiet and shy. I was always afraid that things would get worse for me if I did speak out.	Clip 6: start time: 02:09:28:22, end time: 02:09:56:09 DELETE TEXT IN RED AND CHANGE START & END TIME	
SU7	I'd also probably do a little bit more training because maybe staff are a bit scared of just normal interactions thinking that they're going to have to do a massive therapy thing… …Yeah it's training, it's education and training and building competence and role play, you learn how to do it.	Audio 4: 1) Start time: 52:49, end time: 53:01 2) Start time: 53:34, end time: 53:41	
SU3	Having more interactions with people in settings that aren't, sorry, the wards basically, so having maybe a coffee session outside of the ward where lots of people are altogether, being able to talk together and staff come as well, something like that, I mean that would cost money though but having events that you can do with staff so that you're interacting with them on a different level than in the ward, could be something that would be beneficial, I don't know, I mean, cause when, all you're seeing of one person is that they're in the ward and that they're unwell, you don't really get to see them when they recover, if that makes sense, so maybe having something to do, having people come back into that ward after they've recovered, just as a way of saying, hello, you know, now I'm being so much better, thank you for, having some kind of interaction with them after you've been in the ward… … Seeing people outside of the role that they're being paid for, is maybe so, not in sort of seeing it as a staff Nurse looking after you, seeing it as like someone that	Clip 6: 1) Start time: 00:37:57:19, end time: 00:39:01:22 2) Start time: 00:57:41:09, end time: (NEED TO ADD THIS)	

	you've just had a cup of tea with that was talking to you about, I don't know, football or something like that.		
SU13	I think they would be just acting like a normal person would, I mean just talking to people about general things that are going on, you know, some sports and topical conversation pieces is perhaps going out playing basketball with people or attending some of the group activities and just sort of being there with the person, not just from the medication side of things cause otherwise I think people can form bonds or sort of start to stereotype people almost like, oh the nurses only give me my medication. The OTs only take me for my groups or my walk or whatever. And whether you know, the nurses can do them things as well, I mean it doesn't take a qualification to take someone for a walk so yeah.	Audio 3:	
SU9	Nobody likes to be like in a cage, like a tiger in a cage [yeah] so I would be… if you see some of these people and if somebody doesn't want them to hurt somebody or if they don't want somebody to escape, to go as much as you can outside with the people because the vitamin of the sun is good for you so nobody wants to be like sitting in a cage inside, like a tiger, you know, so to go out. That's my opinion, what I would majorly change, that's my opinion about it.	Audio 3:	
SU1	But I suppose it's all about changing the power structure, instead of having the psychiatrist giving all the advice and drugs it's sort of about the individual trying to sort of say what would help them kind of thing. It's changing the power structures in a way.	Clip 3: start time: , end time:	
SU7	I just think yeah I think there just needs to be a bit more positive leadership or something just to sort of help the nurses. Because they're doing 12/13 hour shifts, absolutely knackered without much support or back up. So I think there needs to be some change and that might help free up people for better interactions. I mean I think politeness maybe sometimes, please, thank you.	Audio 5: Start time: 46:05, end time: 46:47	
SU8	I guess the nurses just take is as a given that you know why you're there, and you know what to do to get better, you know, but sometimes people are so out of it, they aren't even aware that they're on planet earth, kind of thing, they think they're in	Clip 5:	

	another dimension, you know, and that the moon is going to fall on their head or whatever… …they just assume, I suppose that you know you're meant to take your medicine but there's no sitting down and saying right, well, this is your situation, we're not kidnapping you, we're trying to help you come out of your psychosis so that you can get better.	1) start time: 01:01:28:05 end time: 01:01:44:03 2) start time: 01:02:08:21, end time: 01:02:21:09	
SU6	Yes, I mean I think there's an inefficiency in the system in that note writing is supposed to take place at the end of the shift and, you know, that's at the same time that they're having the handover meetings. So it doesn't seem that they're kind of writing up while they're there, which would be a more efficient way really of kind of staggering it really wouldn't it. That's another thing, handover meetings seem to take forever, you know, literally forever.	Audio 5: start time: 00:03:24 end time: 00:03:55	
SU11	Yeah I think the improvement would be the nurses taking you onboard for how you are on that day, you know how you are displaying your feelings on that day and what I mean by that is more, for example… …so the nurses sometimes see you from a past admission and I'm like well no I'm not like that now, I'm like this, or you know, five years ago you were like this on the ward so you are probably going to respond the same and I'm like well no, not really, I mean sometimes I'm very psychotic and think the food is poisoned and the medication is poisoned so that's why I refuse to take the medication because I think it's poisoned, and that's quite difficult as well, but I think some of the nurses should be a lot more lenient with people and allow people to talk and express their emotions to the nurses on a regular basis so that, you know especially a student nurse, can see that.	Clip 4: 1) Start time: 11:34:18:09, end time: 11:34:40:02 2) start time: 11:34:52:22, end time: 11:35:54:18 CHANGE THE END TIME OF 2 AND DELETE PART IN RED	
SU13	I see mainly it's like what different departments are expected to do so like the nurses, especially on the wards that I work on, just seem to do things to do with nursing, so they don't seem to just, if they've got five minutes or half an hour, sit down and perhaps start talking to people in the communal areas. That's reserved for like, you	Audio 3:	

	know, people from my team which, you know, has OTs in it and Peer Support Workers and we're expected to do the group stuff and nurses aren't**.**		
Title	We would like to thank all the service users who took part in the interviews and advised on the production of this film. [Appear first] This film is independent research supported by the National Institute for Health Research (HEE/NIHR ICA Programme Clinical Doctoral Research Fellowship, Ms. Sarah McAllister, ICA-CDRF-2017-03-034). The views expressed in this film are those of the participants and not necessarily those of the NHS, The NIHR or the DH [Appear later]		
Title	[Have text below rolling up the screen like credits in a movie] Study Principal Investigator: Sarah McAllister Supervisors: Prof Glenn Robert, Prof Alan Simpson, Dr. Vicki Tsianakas Interviews & Filming: Sarah McAllister Editing & Post-production: Frank Spencer of Redweather Productions Copyright 2019		

C6 – Touchpoint film release form

RELEASE AND CONSENT FORM FOR RIGHT TO PARTICIPANT'S FILMED INTERVIEW DATA

IRAS Project ID: 229478

Participant Identification Number:

Name of Researcher: Sarah McAllister

Understanding and improving nurse-patient therapeutic engagement on acute mental health wards.

Thank you for your participation in this study. Please indicate your preference below, then sign this form to confirm your agreement.

1. I agree to the inclusion of my filmed interview within a 30-minute film made to show the experiences of me and other service-users, about nurse-patient interactions on acute mental health wards within CNWL NHS Foundation Trust. I understand that no information about my diagnosis, name or location will be on the film, but my image and interview comments may be used in an edited form.

Please click this box if you agree to option 1: ☐

OR

2. I agree to the inclusion of quotes from my filmed interview within a 30-minute film made to show the experiences of me and other service-users, about nurse-patient interactions on acute mental health wards within CNWL Foundation Trust. I understand that no information about my diagnosis, or location will be on the film, but my comments may be narrated and used in an edited form.

Please click this box if you would prefer option 2: ☐

In addition to the above:

I agree that King's College London holds the full rights to the footage of my contribution.

I give permission for the 30-minute film to be used in different formats such as video, paper and/or electronic to share with others as part of this research and for educational purposes within Central and North West London NHS Foundation Trust and King's College London. This will include other service users, carers, health professionals and students.

Please click this box if you agree: ☐

Read, understood and agreed by:

Participant’s name: ____

Participant’s signature: ____

Date: ____

C7.1 – Service user feedback event questionnaire

We would be very grateful if you could spare a couple of minutes to tell us your thoughts about today's event and this project so far. If you are a friend or carer please give us your own thoughts on the day as we would like your opinions too. Please continue any comments overleaf if needed.

Please give us your overall impressions and feelings about:

Seeing the edited film today – did you think it was a good representation of nurse-patient engagement on acute mental health wards? (Please circle/underline and add any comments)

Excellent Good Average Poor Very poor

Please comment:

2. Your experience of being filmed and / or interviewed

Excellent Good Average Poor Very poor

Please comment:

3. Meeting other service users and talking about your experiences

Excellent Good Average Poor Very poor

Please comment:

4. The touch points and emotional mapping exercise as a way to reflect on your experiences and identify priorities for improving the service

Excellent Good Average Poor Very poor

Please comment:

5. Do you feel that the priorities agreed at the end of the day reflect your own experiences of what needs to be improved?

6. Reflecting on the day and the future co-design event with staff, how would you like to see services change as a result of this project?

7. What could be improved if this event were to be run again?

8. Do you have any other comments you would like to add?

Please tick:

Organisation of the event	Excellent	Good	Average	Poor	Very poor
Pre-event information					
Directions to venue					
Accessibility of venue					
Catering					

Many thanks for your comments and thoughts.

C7.2 – Staff feedback event questionnaire

We would be very grateful if you could spare a couple of minutes to tell us about your thoughts about today's event and this project so far. Please continue any comment overleaf if needed.

1. What are your overall impressions and feelings about the event today?

(Please tick and add any comments)

Excellent	Good	Average	Poor	Very poor

Please comment:

2. What do you think of this event/process as a way to reflect upon your experiences at work?

Excellent	Good	Average	Poor	Very poor

Please comment:

3. Do you feel that the priorities agreed at the end of the day reflect your own experiences of delivering the service and how it could be improved?

4. Reflecting on the day and the future co-design event with patients, how would you like to see services change as a result of this project?

5. What could be improved if this event were to be run again?

6. Is there anything else that you would like to add about any other aspect of this project so far?

7. Do you have any other comments you would like to add?

Please tick:

Organisation of the event	**Excellent**	**Good**	**Average**	**Poor**	**Very poor**
Pre-event information					
Directions to venue					
Accessibility of venue					
Catering					

Many thanks for your comments and thoughts.

C6.3 – Joint service user-staff event

We would be very grateful if you could spare a couple of minutes to tell us your thoughts about today's event. If you are a friend, relative or carer please give us your thoughts on the day as we would like your opinions too. Please continue any comments overleaf if needed.

I am a: (Please tick)

Member of staff ☐ Service user ☐ Friend/Relative/Carer ☐

Please give us your overall impressions and feelings about:

1. Seeing the service users' film today – (if you have already seen it at the service user event let us know if your impressions have changed at all seeing it a second time)

(Please circle or underline and add any comments)

Excellent Good Average Poor Very poor

Please comment:

2. Talking about and sharing the different experiences of both staff and service users

Excellent Good Average Poor Very poor

Please comment:

3. Discussing and deciding with both service users and staff the priorities that will be worked on and improved in this project

Excellent Good Average Poor Very poor

Please comment:

4. Did you feel comfortable participating in the event and able to contribute your own thoughts and experiences?

Excellent Good Average Poor Very poor

Please comment:

5. Was there anything that you didn't get a chance to say that you wanted to contribute to the discussion?

6. What could be improved if this event were to be run again?

1. Do you have any other comments you would like to add?

Please tick:

Organisation of the event	Excellent	Good	Average	Poor	Very poor
Pre-event information					
Directions to venue					
Accessibility of venue					
Catering					

Many thanks for your comments and thoughts.

APPENDIX D

D.1 – Supplementary material from Chapter 7, paper 4

D1.1 - TDF domain labels and definitions (from Cane et al. 2012)

Domain	**Definition**
1. Knowledge	An awareness of the existence of something.
2. Skills	An ability or proficiency acquired through practice.
3. Social/Professional Role and Identity	A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting.
4. Beliefs about Capabilities	Acceptance of the truth, reality, or validity about an ability, talent, or facility that a person can put to constructive use.
5. Optimism	The confidence that things will happen for the best or that desired goals will be attained.
6. Beliefs about Consequences	Acceptance of the truth, reality, or validity about outcomes of a behaviour in a given situation.
7. Reinforcement	Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus.
8. Intentions	A conscious decision to perform a behaviour or a resolve to act in a certain way.
9. Goals	Mental representations of outcomes or end states that an individual wants to achieve.
10. Memory, Attention and Decision Processes	The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives.
11. Environmental Context and Resources	Any circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence, and adaptive behaviour.
12. Social influences	Those interpersonal processes that can cause individuals to change their thoughts, feelings, or behaviours.

13. Emotion	A complex reaction pattern, involving experiential, behavioural, and physiological elements, by which the individual attempts to deal with a personally significant matter or event.
14. Behavioural Regulation	Anything aimed at managing or changing objectively observed or measured actions.

D.1.3 – Matrix linking intervention functions to BCTs (Michie et al. 2014)

Intervention function	Individual BCTs
Education Increasing knowledge or understanding e.g. Providing information to promote healthy eating	Most frequently used BCTs: • Information about social and environmental consequences • Information about health consequences • Feedback on behaviour • Feedback on outcome(s) of behaviour • Prompts/cues • Self-monitoring of behaviour Less frequently used BCTs: • Biofeedback • Self-monitoring of outcome(s) of behaviour • Cue signalling reward • Satiation • Information about antecedents • Re-attribution • Behavioural experiments • Information about emotional consequences • Information about others' approval
Persuasion Using communication to induce positive or negative feelings or stimulate action e.g. Using imagery to motivate increases in physical activity	Most frequently used BCTs: • Credible source • Information about social and environmental consequences • Information about health consequences • Feedback on behaviour • Feedback on outcome(s) of the behaviour Less frequently used BCTs: • Biofeedback • Re-attribution • Focus on past success • Verbal persuasion about capability • Framing/reframing • Identity associated with changed behaviour • Identification of self as role model • Information about emotional consequences • Salience of consequences • Information about others' approval • Social comparison
Incentivisation Creating an expectation of reward e.g. Using prize draws to induce attempts to stop smoking	Most frequently used BCTs: • Feedback on behaviour • Feedback on outcome(s) of behaviour • Monitoring of behaviour by others without evidence of feedback • Monitoring outcome of behaviour by others without evidence of feedback • Self-monitoring of behaviour Less frequently used BCTs: • Paradoxical instructions • Biofeedback • Self-monitoring of outcome(s) of behaviour • Cue signalling reward • Remove aversive stimulus • Reward approximation • Rewarding completion • Situation-specify reward • Reward incompatible behaviour • Reduce reward frequency • Reward alternate behaviour • Remove punishment • Social reward • Material reward • Material reward (outcome) • Self-reward • Non-specific reward • Incentive • Behavioural contract • Commitment • Discrepancy between current behaviour and goal • Imaginary reward
Coercion Creating an expectation of punishment or cost e.g. Raising the financial cost to reduce excessive alcohol consumption	Most frequently used BCTs: • Feedback on behaviour • Feedback on outcome(s) of behaviour • Monitoring of behaviour by others without evidence of feedback • Monitoring outcome of behaviour by others without evidence of feedback • Self-monitoring of behaviour Less frequently used BCTs: • Biofeedback • Self-monitoring of outcome(s) of behaviour • Remove access to the reward • Punishment • Behaviour cost • Remove reward • Future punishment • Behavioural contract • Commitment • Discrepancy between current behaviour and goal • Incompatible beliefs • Anticipated regret • Imaginary punishment

Training Imparting skills e.g. Advanced driver training to increase safe driving	Most frequently used BCTs: • Demonstration of the behaviour • Instruction on how to perform a behaviour • Feedback on the behaviour • Feedback on outcome(s) of behaviour • Self-monitoring of behaviour • Behavioural practice/rehearsal Less frequently used BCTs: • Biofeedback • Self-monitoring of outcome(s) of behaviour • Habit formation • Habit reversal • Graded tasks • Behavioural experiments • Mental rehearsal of successful performance • Self-talk • Self-reward
Restriction Using rules to reduce the opportunity to engage in the target behaviour (or to increase the target behaviour by reducing the opportunity to engage in competing behaviours) e.g. Prohibiting sales of solvents to people under 18 to reduce use for intoxication	No BCTs in BCTTv1 are linked to this intervention function because they are focused on changing the way that people think, feel and react rather than the way the external environment limits their behaviour.
Environmental restructuring Changing the physical or social context e.g. Providing on-screen prompts for GPs to ask about smoking behaviour	Most frequently used BCTs: • Adding objects to the environment • Prompts/cues • Restructuring the physical environment Less frequently used BCTs: • Cue signalling reward • Remove access to the reward • Remove aversive stimulus • Satiation • Exposure • Associative learning • Reduce prompt/cue • Restructuring the social environment
Modelling Providing an example for people to aspire to or imitate e.g. Using TV drama scenes involving safe-sex practices to increase condom use	Most frequently used BCTs: • Demonstration of the behaviour
Enablement Increasing means/ reducing barriers to increase capability (beyond education and training) or opportunity (beyond environmental restructuring) e.g. Behavioural support for smoking cessation, medication for cognitive deficits, surgery to reduce obesity, prostheses to promote physical activity	Most frequently used BCTs: • Social support (unspecified) • Social support (practical) • Goal setting (behaviour) • Goal setting (outcome) • Adding objects to the environment • Problem solving • Action planning • Self-monitoring of behaviour • Restructuring the physical environment • Review behaviour goal(s) • Review outcome goal(s) Less frequently used BCTs: • Social support (emotional) • Reduce negative emotions • Conserve mental resources • Pharmacological support • Self-monitoring of outcome(s) of behaviour • Behaviour substitution • Overcorrection • Generalisation of a target behaviour • Graded tasks • Avoidance/reducing exposure to cues for the behaviour • Restructuring the social environment • Distraction • Body changes • Behavioural experiments • Mental rehearsal of successful performance • Focus on past success • Self-talk • Verbal persuasion about capability • Self-reward • Behavioural contract • Commitment • Discrepancy between current behaviour and goal • Pros and cons • Comparative imagining of future outcomes • Valued self-identity • Framing/reframing •

	Incompatible beliefs • Identity associated with changed behaviour • Identification of self as role model • Salience of consequences • Monitoring of emotional consequences • Anticipated regret • Imaginary punishment • Imaginary reward • Vicarious consequences

D1.4 – Detailed identification of BCTs from all data sources with illustrative quotes from each document

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
1.Goals and planning						
1.1	Goal setting (behaviour)	Set or agree a goal defined in terms of the behaviour to be achieved (Note: only code goal setting if there is sufficient evidence that goal set as part of intervention)	**Setting up:** work with senior leaders to identify areas of focus. Try to pick an area in which staff already recognise that change is needed, but not one that is so heavily shaped by wider factors it will be impossible to overcome.	**Setting up**: (e.g. consulting staff about what we want the study to achieve) **Feedback events**: will agree on points of action to take forward into co-design event **Joint co-design event**: will collectively agree on what points of action to take forward when co-designing the intervention to improve engagement	**Service user & staff feedback events:** as a group we agreed on the improvement priorities to take forward to the joint co-design event **Joint co-design event**: as a group we decided on the main priorities for improvement and set a goal to jointly co-design and implement improvements to those priorities over the coming months	**Joint event:** "discussing the joint priorities was an incredibly important part of the process. Doing it together ensure we met priorities for both staff and service users so everybody is happy"
1.2	Problem solving	Analyse or prompt the person to analyse, factors influencing the behaviour and generate or select strategies that include overcoming barriers and/or increasing facilitators (Note: barrier identification	**Setting up:** Is experience-based co-design for you? Discussing the wider benefits of undertaking EBCD. **Joint events & small co-design teams:** Staff and patients are then brought together to explore the findings and to work in small groups to identify and implement activities that will improve the service or care pathway	**Feedback events**: During these events, findings from the focus groups and interviews will be fed back to staff and service-users. Each group will decide their main improvement priorities for engagement **Joint event**: service-user and staff share their priorities and evenly mixed groups of service-users and staff form to discuss how their main areas of concern will be addressed in the intervention **The film:** Stimulate discussion between staff and service-users at the joint patient-staff event regarding potential	**Staff feedback event:** After the emotional mapping exercise staff had an open and frank discussion with each other where the AC spoke about her frustrations at not being kept up to date with service users' leave. This led to the staff beginning to formulate strategies they could implement to ensure that patient's leave was communicated more clearly to the whole team **Joint event**: As part of a facilitated activity we got service users and staff to think about and write down their improvement priorities, potential barriers and	**Staff feedback event:** "emotional mapping exercises and the discussions we had were very thought provoking and will definitely lead me to improve/adapt my current approach"

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
		without solutions is not sufficient)		improvements that can be made to engagement **Small co-design teams**: Co-design team(s) of staff and service-users, formed in the joint event will meet to work on developing the intervention	facilitators to achieving these and solutions they think could be put in place to make those improvement priorities reality **Small co-design teams:** During these meetings we looked at the intervention prototypes developed in the joint event and made changes and improvements to them in an iterative process by thinking about the barriers and facilitators to implementing them in practice (using APEASE criteria) **The film**: The film generated a very open and frank discussion between staff and service users about coercive, restrictive practice and physical restraint. Each side gave their reasons why they thought these practices happened and there was a joint understanding that it came from a place of fear from both staff and service users. The group started to generate ideas about how this could be improved e.g. procedures book, and having open conversations being specific about exactly what it is that is required of a patient	
1.4	Action Planning	Prompt detailed planning of	**Setting up:** Agree duration, frequency and diarise regular	**Setting up**: Presentation of study to participating wards where information	**Setting up:** throughout the study plans were made with various	

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
		performance of the behaviour (must include at least one of context, frequency, duration and intensity). Context may be environmental (physical or social) or internal (physical, emotional or cognitive) (includes 'Implementation Intentions')	project performance meetings. Agree overall timeline for EBCD project.	sheets and consent forms will be available for staff to take. Posters will be displayed in communal areas on participating wards, with the researcher's contact details	members of staff and service users in perms of the context, frequency, duration and intensity of the EBCD process. This included through PowerPoint presentations, participant information sheets and event invitations	
1.5	Review Behaviour goal(s)	Review behaviour goal(s) jointly with the person and consider modifying goal(s) or behaviour change strategy in light of achievement. This may lead to re-setting the same goal, a small change in	**Setting up:** steering group meets regularly to discuss project and its goals **Small co-design team:** weighing up the benefits of each option for different groups of stakeholders and checking that they are SMART		**Staff feedback event:** Staff reflected on their current practice and touchpoints and based on this discussion we developed priorities for improvement and thought about how staff may modify their behaviour to enable these priorities to happen in practice **Joint event:** we had a facilitated large group discussion about what people thought could be put in place to improve therapeutic engagement based on people's	**Staff feedback event:** "this was a great opportunity for staff to sit together and discuss different issues that happen on the ward" "allowed space for reflective and honest discussions which probably wouldn't have happened otherwise"

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
		that goal or setting a new goal instead of (or in addition to) the first, or no change			experiences of engagement and the service users and staff's previously generated improvement priorities. From this we generated 4 joint improvement priorities **Small co-design teams:** During these meetings we looked at the intervention prototypes developed in the joint event and made changes and improvements to them in an iterative process by thinking about the barriers and facilitators to implementing them in practice (using APEASE criteria). We got PPI to review early prototypes of the intervention and revised the prototypes based on this feedback.	
1.6	Discrepancy between current behaviour and goal	Draw attention to discrepancies between person's current behaviour and person's previously set outcome goals, behavioural goals or action plans			**Joint event**: staff spoke about how they felt like they always explained processes and procedures to service users, however service users told them that they often felt like they did not have things explained to them **Film**: after watching the film, staff said it highlighted discrepancies in what they thought service users wanted versus what they were providing in practice e.g. people	

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
					who stay in their rooms do not want to be left alone, they want therapeutic engagement	
1.9	Commitment	Ask the person to affirm or reaffirm statements indicating commitment to change	**Setting up:** this stage involves getting sign-up from senior colleagues and senior management **Feedback events:** the facilitator must be well briefed, familiar with the content and adept at inspiring commitment and discussion among the participants		**Joint event**: staff and service users were asked to commit to joining a small co-design team so they could continue developing the improvements over the coming months. Not all staff and service users agreed to this, however there were a majority that did.	
2. Feedback and monitoring						
2.1	Monitoring of behaviour by others without feedback	Record or observe behaviour with person's knowledge as part of a behaviour change strategy	**Observations**: once you receive the go-ahead for the project, your first activity is likely to be observation. This is an extremely important stage that involves spending time within the service, watching how the teams and systems operate on the ground	**Observations**: Other processes and practices deemed relevant to therapeutic engagement will be recorded		
2.2	Feedback on behaviour	Monitor and provide information or evaluative feedback on performance of behaviour	**Feedback event:** Findings of the interviews and observations are fed back to the group (including lots of quotes from staff) and then facilitator seeks staff feedback and discussion about these views	**Feedback events**: During these events, findings from the interviews and interviews will be fed back to staff and service-users **The film**: The film will show "touchpoints" that have either a positive or negative influence on patients' experiences of therapeutic engagement. This will enable staff to see a true picture	**Staff and service user feedback event:** staff were given feedback on their practice relating to the observations that were done on the ward	**The film:** "Good to know what service users think about"

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
				of how service-users experience engagement within their service		
2.5	Monitoring outcome(s) of behaviour by others without feedback	Observe or record outcomes of behaviour with the person's knowledge as part of a behaviour change strategy e.g. Record blood pressure, blood glucose, weight loss, or physical fitness	**Observations:** People observing should note specific areas of good practice, anything unusual, worrying, confusing or particular points affecting patient experience.	**Observations:** observations were conducted on the intervention ward, which recorded the amount, type and quality of nurse-patient therapeutic engagement	**Observations:** observations were conducted on the intervention ward, which recorded the amount, type and quality of nurse-patient therapeutic engagement	
2.7	Feedback on outcomes of behaviour	Monitor and provide feedback on the outcome of performance of the behaviour	**Feedback event:** Findings of the interviews and observations are fed back to the group (including lots of quotes from staff) and then facilitator seeks staff feedback and discussion about these views **Celebration event:** This stage involves gathering data and communicating outcomes to others to demonstrate the value of the project	**Film:** The film will show "touchpoints" that have either a positive or negative influence on patients' experiences of therapeutic engagement. This will enable staff to see a true picture of how service-users experience engagement within their service **Celebration event:** Trust will be invited to see the achievements and consider whether to adopt the approach themselves	**The film**: Service users gave their own accounts of how they experience therapeutic engagement, and what the outcomes of good and bad engagement was, this really moved some of the staff and resulted in discussions around how they could change their behaviours based on the experiences of service users **Staff feedback event:** staff were given feedback on their practice relating to the observations that were done on the ward. They were told about how sometimes	**The film:** "I gained a better understanding of service users' feelings and fears" "I saw the film once before, but this time it was 10 x more powerful. Hearing those present who this is mainly aimed at, I think made them think. Think about what they are doing, how they are acting, how simple things can be/make a real difference."

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
					you could see a situation escalate over the day, and we discussed places where staff could potentially intervene to stop the situation from escalating **Joint event**: the staff were very moved by watching the film at this event. They said that it highlighted things that they may not have realised about the service they are giving and the things they do in practice.	“A real eye opener and makes you reflect on everyday life on the ward”
3. Social support						
3.1	Social support (unspecified)	Advise or arrange social support from friends, colleagues or non-contingent praise or reward for performance of the behaviour	**Setting up:** put in place some form of social support in case anyone involved in the project is affected by the issues that arise **Feedback events:** the facilitator supports the group to identify issues needing service improvement		**Setting up:** created a core group of three SUs who would support others and learn the EBCD approach **SU feedback event:** the feedback event enabled service users to talk about their own experiences of nurse-patient engagement and other experiences related to the ward. We had many lengthy discussions about people’s individual experiences and related them back to the group. People were supportive of each other when sharing experiences, and there was a sense of camaraderie where experiences were shared between people	~~**Overall**~~: ~~“I have felt really involved with every step of the process”~~ **Staff feedback event:** “relaxed environment that allowed for open and productive discussion” ~~“allowed space for reflective and honest discussions which probably wouldn’t have happened otherwise”~~ ~~**SU feedback event:**~~ ~~“things kept popping up that I could relate to”~~ ~~“highlighted common themes that I can certainly relate to”~~

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
					Staff feedback event: staff said that this event was the first chance they had been given to discuss, as a team, things that were important to them. There was a sense of cohesion and support when talking about things that bothered them, and different staff types sometimes praised other staff for good practice e.g. the nursing team were praised for responding when there was an emergency	
4. Shaping knowledge						
4.1	Instruction on how to perform a behaviour	Advise or agree on how to perform the behaviour	**Setting up:** Assess training and experience of project participants undertaking substantial roles in project.		**Setting up:** core group of service users attended EBCD training from Point of Care Foundation **SU and staff feedback event**: Discussed and agreed on how nurse-patient therapeutic engagement should be carried out on the ward **The film**: watching the film enabled staff to see from the service users' point of view how TE should be carried out. Staff and service users also discussed this as a group and clarified misconceptions on both parts, so everybody left with a greater understanding of therapeutic engagement from both sides	

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
					Small co-design teams: at these meetings discussions occurred between participants that enabled people to think about the best ways of performing therapeutic engagement e.g. when will the work booklets best be used, how will the nurses and the service users use each of the interventions, what is the best way to access these etc.	
4.2	Information about antecedents	Provide information about antecedents that reliably predict performance of the behaviour			**Feedback & joint events:** we presented the barriers and facilitators to therapeutic engagement as per the COM-B model and discussed this as a group **Joint event**: as part of a facilitated exercise we enabled participants to think about the things that would help their improvement priorities become a reality **Film**: service users spoke about things that made TE happen in practice	
4.3	Behavioural experiments	Advise on how to identify and test hypotheses about the behaviour, its causes and consequences, by collecting and interpreting data	EBCD overall	EBCD overall	EBCD overall	

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
5. Natural consequences						
5.1	Information about health consequences	Provide information e.g. written, verbal, visual) about health consequences of performing the behaviour			**Setting up**: Discussing the wider benefits of undertaking EBCD such as how other projects in a MH setting have improved formal complaints and communication on MH inpatient wards. **The film:** included sections where service users spoke about the negative effects of not receiving therapeutic engagement, or bad therapeutic engagement and the positives of good therapeutic engagement	
5.2	Salience of health consequences	Use methods specifically designed to emphasise the consequences of performing the behaviour with the aim of making them more memorable	**Film:** A short, edited film is created from the patient interviews. This is shown to staff and patients conveying in an impactful say how patients experience that service.		**The film:** This had a big impact on staff, so much so that staff requested for the film to be shown to others who were unable to make the event. Some staff came to me after the event to say how moved they had been by watching it. The film included sections where service users spoke about the negative effects of not receiving therapeutic engagement, or bad therapeutic engagement and the positives of good therapeutic engagement	
6. Comparison of behaviour						
6.2	Social comparison	Draw attention to others' performance to			**Staff event:** the AC brought up the fact that patient leave wasn't always communicated to her, and that she had to always check with	**Joint event:** "I wish there had been more time for staff and service users to talk about how we see

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
		allow comparison with the person's own performance *(Note: being in a group setting does not necessarily mean that social comparison is actually taking place)*			nursing staff before taking a patient out, which meant that engagement time was reduced **Joint event**: service users told staff about good and bad TE they have experienced through the film and also through open discussions. This included using examples of how specific staff had treated them in the past and in relation to things that staff had said to them e.g. when speaking about restraint a staff member was saying how it was a safety measure and felt like it needed to happen, and a service user explained about a time when they were becoming aggressive, but the situation was handled well by a nurse and was able to be de-escalated before restraint happened **Small co-design teams:** two service users had a conversation and one of them said how they stayed in their room all the time, and were ignored by staff and the other one said how he would come out of his room and specifically ask staff to talk and sometimes this worked for him to get TE	each other, this was a great chance to do that and the day went too quickly" "It was enlightening to hear more about the staff's side of things, as you don't often get the chance to hear about this" "I am happy I was chosen to contribute; I am glad to have had a chance to tell my story and give feedback. I especially found hearing more about the nurses' experiences enlightening" "Interesting to hear other staff's thoughts and opinions on things. It was beneficial to reduce an us vs. them dichotomy" "good to hear different perspectives" "Interaction between staff and service users is good and after the discussion, both sides know and

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
						understand the other side's point of view" "Hearing both sides of the coin has been really beneficial" "it was so beneficial having both parties involved and coming together to create change and understand each other's points of view"
6.3	Information about others' approval	Provide information about what other people think about the behaviour. The information clarifies whether others will like, approve or disapprove of what the person is doing or will do	**Film:** A short, edited film is created from the patient interviews. This is shown to staff and patients conveying in an impactful way how patients experience that service. **Joint event**: This event brings together the patients and staff to hear each other's perspectives on the service and identify key priorities to tackle together to make improvements	**Film:** Service users will speak about good and bad experiences of engagement	**Feedback event:** the staff were able to speak freely with each other, for the first time, and discussed positive and negative aspects of their practice. They learnt that there were problems with the way some of the team handed over information, which lead to inconsistencies in patient's care. This was looked upon as something that needed to be changed in order to improve the way patients experienced engagement on the ward. **Film:** showing the service user film enabled nurses to see how their actions were experienced by service users.	**Film:** "I gained a better understanding of service users' feelings and fears" "Good to know what service users think about"

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
					Joint event: There were also facilitated and open discussions by staff and service users about several topics related to TE that enabled each party to see how the other felt e.g. restraint, people who stay in their bedrooms, fear of being attacked etc.	
7. Associations						
7.1	Prompts and cues	Introduce or define environmental or social stimulus with the purpose of prompting or cueing the behaviour. The prompt would normally occur at the time or place of performance	**Setting up**: you may like to think of a catchy title and publicise your project by displaying posters	**Setting up**: posters will be displayed in communal areas of the ward to inform staff and service users about the aims and purpose of the work		
7.6	Satiation	Arrange repeated exposure to a stimulus that reduces or extinguishes a drive for the unwanted behaviour	**All stages**: Participants will attend many EBCD events	**All stages**: Participants will attend many EBCD events	**All stages**: Many participants attended several or all of the EBCD events	
9. Comparison of outcomes						

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
9.1	Credible source	Present verbal or visual communication from a credible source in favour or against the behaviour	**Film:** A short, edited film is created from the patient interviews. This is shown to staff and patients conveying in an impactful way how patients experience that service **Joint event**: This event brings together the patients and staff to hear each other's perspectives	**Film:** A film showing patient "touchpoints" will be shown to staff and service users at the joint co-design event	**The film:** the film shown at the joint event included sections where service users spoke about the benefits of TE and the negatives of not receiving it. The SUs should be a credible source to the nurses. **Joint event**: discussions that ensued between service users and staff enabled the service users to talk about how they experienced engagement, and what engagement meant to them **Celebration event:** showing the service users' interview snippets to staff at the acute care forum had a significantly positive impact. People said they were "blown away" by the presentation	**Film:** "Incredibly powerful video – I think every member of staff in acute settings should see this!" "A real eye opener and makes you reflect on everyday life on the ward"
9.2	Pros and cons	Advise the person to identify and compare reasons for wanting and not wanting to change the behaviour	**Setting up:** Approach individuals and talk to them about what motivates them	**Semi-structured interviews:** will use the COM-B model and TDF to structure questions around participants' personal experiences of engagement, and to explore their capabilities, opportunities and motivations for engagement	**SU feedback event:** talked about motivation to engage with nurses e.g. some people said that medications etc. interfere with that or that they are too scared to come out of their rooms in case they are attacked or they are ignored by nurses, so it's better not to engage **Staff feedback event**: staff spoke about how life can be made easier on the ward if you have a good relationship with service users –	**Staff feedback event:** "allowed space for reflective and honest discussions which probably wouldn't have happened otherwise" "good to voice thoughts and feelings around issues with ward culture and how our service users are feeling"

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
					conflict situations arise less frequently if you're in constant engagement with service users. They also spoke at length about not having the time to engage properly **these things weren't advised at the beginning, but they came naturally out of the conversations**	"I felt that I could explain my concerns in a positive way" "this was a great opportunity for staff to sit together and discuss different issues that happen on the ward" "relaxed environment that allowed for open and productive discussion"
10. Reward and threat						
10.4	Social reward	Arrange verbal or non-verbal reward if and only if there has been effort and/or progress in performing the behaviour			**Celebration event:** the service users who attended the acute care forum were really able to see the benefits of their work. Staff came up to the group and praised us for the work we had done and told us that this type of work was exactly what they wanted to be aiming for at the Trust	
10.10	Reward (outcome)	Arrange for the delivery of a reward if and only if there has been effort and/or progress in achieving the behavioural outcome	**Celebration event:** Holding a celebration event and feedback areas of improvement made and in progress.	**Celebration event:** Holding a celebration event and feedback areas of improvement made and in progress.	**Celebration event**: gave all participants a tangible sense of achievement and pride. Potential culture shift within the Trust as people saying SU involvement in the way it was done in this project is what they were aiming for as a way of working within the Trust	
12. Antecedents						

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
12.2	Restructuring the social environment	Change, or advise to change the physical environment in order to facilitate performance of the wanted behaviour or create barriers to the unwanted behaviour (other than prompts / cues, rewards and punishments)	**All events**: book venues well in advance and try to achieve an atmosphere that is not too formal or clinical but that is sufficiently professional for staff to take it seriously		**All events**: were held in areas outside of the ward environment, which enabled staff and service users to break away from their traditional roles and talk with each other as equals	**Staff feedback event:** "allowed space for reflective and honest discussions which probably wouldn't have happened otherwise"
13. Identity						
13.1	Identification of self as role model	Inform that one's own behaviour may be an example to others			**Celebration event**: staff that were not involved with the project came to the co-design team and told them that the work we had done was exactly how the Trust wanted to work in the future and felt that all change projects should be conducted the way that ours was	
13.3	Incompatible beliefs	Draw attention to discrepancies between current or past behaviour and self-image, in order to create discomfort (includes			**Joint event:** see above e.g. staying in room nurses said they thought this meant SUs didn't want to talk etc. and saying that they will remember that in the future and make an effort to speak to people who are in their rooms.	

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
		'Cognitive dissonance')				
15. Self-belief						
15.3	Focus on past success	Advise to think about or list previous successes in performing the behaviour or parts of it	**Semi-structured interviews:** the provided interview script gives examples of questions where staff and service users will be talking about their past experiences and what was good and bad about them **Feedback event**: when seeking feedback ask for participants' positive and negative perceptions	**Semi-structured interviews:** Interview questions asked participants to talk about times when they had been involved in nurse-patient engagement that had gone well	**Service user feedback event:** had a discussion with service users about when they were able to interact in a positive way with nurses and what that would look like and how the qualities the nurses displayed could be used within this EBCD process **Staff feedback event**: had a discussion with staff about when they were able to interact in a positive way with service users, and brought up things that were said in their interviews about successful interactions **Film and joint event**: service users spoke about things that had helped them in the past to engage with nurses e.g. just sitting and listening or being clear about the things that were going to happen to them while they were admitted and explaining procedures clearly rather than being coercive **Small co-design teams**: there were many discussions about what things had worked well in the past to improve TE, particularly at the PPI feedback	

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
					session. This was used to improve the first prototype of the Conversation Companion workbook	
16. Covert learning						
16.3	Vicarious consequences	Prompt observation of the consequences (including punishments and rewards) for others when they perform the behaviour		**Film**: Enable staff to see a true picture of how service-users experience engagement within their service	**Staff feedback event:** staff were able to see how their actions affected other members of the team e.g. scenarios that were discussed were around the impact if people didn't respond to the emergency alarm, or if somebody was rude to a service user and then another staff member had to step in to diffuse the situation **Film**: staff saw first-hand how service users experienced both good and bad engagement. You could see some uncomfortable movements in the room and people fiddling with their hands or looking down at the table when service users gave a bad account of engagement. Staff afterwards said how moving the film was and how it had really inspired them to improve the way they interacted with service users **Joint event**: staff said to me how powerful the film had been, and how they hadn't realised certain things about how upsetting it	

No.	Label	Definition	EBCD toolkit	Protocol examples	Observation examples	Questionnaire examples
					could be for service users to be left on their own. They could see the emotions of the service users when discussing engagement and could see how it affected them emotionally. This was also the same for service users – they commented on how they understood how stressful it was for staff and how engaging must be difficult	

APPENDIX E

E1 – Service user recruitment poster for observations, showing the opt-out process

Do you work on Thames Ward?

We want YOUR ideas…

Have your say and co-design solutions to improve the quality of nurse-patient interactions on your ward.

Let's talk!

1. Ward practice will be observed
2. You will answer some questions
3. You will work together with service-users to co-design solutions to improve nurse-patient interactions
4. The solutions you co-design will be implemented on your ward

Want to participate? Email for more information!

Sarah.McAllister@kcl.ac.uk

Lunch and light refreshments provided

If any staff or service-user wishes to opt-out of the observations, let the researcher know

Thank you!

KING'S College LONDON

Central and North West London NHS
NHS Foundation Trust

This study has been approved by the London Fulham Research Ethics Committee reference 18/LO/2193

UNITED_STUDY_V1.0_11/10/2018

IRAS Project ID: 229478

Understanding and improving nurse-patient therapeutic engagement on acute mental health wards

Hello! My name is Sarah McAllister. I'm a mental health nurse and clinical doctoral research fellow at King's College London. I would like to invite you to take part in a questionnaire which forms part of my PhD study to improve nurse-patient interactions on acute mental health wards.

Before you decide if you want to take part, I would like you to understand why the research is being done and what it would involve for you. I will go through this information sheet with you and answer any questions you have.

Please ask me anything that is not clear.

What is the purpose of this study?

This study seeks to improve the quality of nurse-patient engagement on acute mental health wards because we know through past research that positive interactions between nurses and patients admitted to acute wards improve patient outcomes and increase nurses' job satisfaction.

A team of service users, carers and clinicians are using an approach called Experience-based Co-design (EBCD) to provide a unique opportunity to work alongside each other and co-design solutions to improve nurse-patient engagement on acute mental health wards. This information sheet explains this study, in which two wards will deliver either the co-designed solutions to improve engagement, or continue with care as usual, to see which works best for people.

Why have I been invited?

We are inviting people who have been admitted to [insert ward name] or [insert ward name] for at least seven days. As you are the direct recipients of care given within this Trust, your views are particularly important to this study.

Do I have to take part?

No. Taking part is completely up to you. Whether you decide to take part or not, will not affect the standard of your care or your rights as a patient in any way.

What will happen to me if I do take part?

If you agree to take part we will give you a questionnaire to complete. The questionnaire is called VOICE (Views on Inpatient Care). It has 19 questions that measure your perceptions of inpatient care on ***this*** ward only.

The questionnaire takes about 15 minutes to complete. By completing the questionnaire, you will consent to take part in this study.

You can take time to consider your participation in this study, and discuss your decisions with your family, friends and care team, or you can complete the questionnaire straight away. We will collect your questionnaire from you once you have completed it.

What are the possible risks of taking part in the questionnaire?

It is not expected that there are any major risks in taking part in this questionnaire. If for any reason you feel uncomfortable about the questions asked, you are reminded that you have the right to withdraw at any time. If you wish to speak to a researcher or your care team, this can be arranged.

What are the possible benefits of taking part in the questionnaire?

There are no immediate benefits for you in taking part. However, this work may be very useful in providing evidence to mental health nurses and other clinicians so that they interact with you in ways that are beneficial to your recovery. It will also enable you to have your say about your experiences of nursing care on this ward.

Payments

There will be no payment for this questionnaire, but it is hoped that your time will help us to improve inpatient experiences in the future.

What will happen if I don't want to carry on with the study?

You can choose to leave the study at any time without giving a reason and this won't affect your rights as a patient in any way. If you wish, your data can be withdrawn from the study up until data analysis has been completed.

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak to the lead researcher, Sarah McAllister, who will do her best to answer your questions (Sarah McAllister, Sarah.McAllister@kcl.ac.uk). If you would like to speak to somebody independent of the study, you can contact the CNWL Patient Advice and Liaison service (0203 214 5773, pals.cnwl@nhs.net).

In the event that something does go wrong and you are harmed during the research then you may have grounds for legal action for compensation against King's College London, but you may have to pay your legal costs. King's College London maintains adequate insurance to cover any liabilities arising from the study.

Will my participation be kept confidential?

Yes. All information you give in the questionnaire will be kept strictly confidential. **Your data will be processed in accordance with the General Data Protection Regulation (GDPR).** Any information about you that leaves the hospital will be completely anonymised and will not be connected to you by name or any other recognisable feature.

This data will be kept in a secure locker at King's College London and only my supervisory team and I will have access to it. It may be important to look at the data in years to come, so it will be kept securely for seven years and then be securely disposed of in confidential waste.

What will happen to the results of the research?

Once you have done your questionnaire you will not need to meet with me again. Your responses will be analysed along with the responses from other people who took part in the study. We will look at what you said in detail and will consider how it can be used to improve our research methods in the future.

Sarah McAllister will write the results up and submit them as part of a PhD thesis at King's College London. We also hope to publish the results in scientific journals and present them at academic conferences. You will not be identified in any report. If you would like to receive feedback on the results of the study, please let the researcher know when they collect your completed questionnaire.

Who is organising and funding this research?

The research is being carried out by Sarah McAllister, as part of a National Institute for Health Research funded doctoral study at the Florence Nightingale Faculty of Nursing, Midwifery and Palliative Care, King's College London. The research is being supervised by Professor Glenn Robert, Professor Alan Simpson and Dr. Vicki Tsianakas.

Has the research been reviewed by an appropriate research ethics committee?

To protect your interests, all research in the NHS is looked at by an independent group of people called the Research Ethics Committee. This study has been reviewed and given favourable opinion by the by the London Fulham Research Ethics Committee reference 18/LO/2193.

Data protection statement

King's College London is the sponsor for this study based in the United Kingdom. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. King's College London will keep identifiable information about you until you either tell us you no longer wish to take part in the study, or once the study has finished in March 2021. Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

You can find out more about how we use your information at www.kcl.ac.uk/innovation/research/support/ethics/how-does-gdpr-affect-ethics/king's-college-london-statement-on-use-of-personal-data-in-research.aspx

Central and North West London will keep your name and contact details confidential and will not pass this information onto King's College London. Central and North West London will use this information, as needed, to contact you about the research study and make sure relevant information about the study is recorded for your care, and to oversee the quality of the study. Individuals from King's College London and regulatory organisations may look at your medical and research records to check the accuracy of the research study. King's College London will only receive information without identifying information. King's College London keep identifiable information about you from this study until the study completion date – 31/03/2021.

What happens if you would like more information about the study?

If you would like to ask any questions or receive more information about the study, please contact Sarah McAllister:

Email: Sarah.McAllister@kcl.ac.uk

Telephone: 07868005773

Address: King's College London,

Florence Nightingale Faculty of Nursing

& Midwifery and Palliative Care,

57 Waterloo Road,

London,

SE1 8WA

Thank you for reading.

Please feel free to keep a copy of this information sheet.

You will also be given a copy of the consent form should you decide to sign it.